

THE AMERICAN FARMER



"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." Virg.

Vol. XIII.

BALTIMORE, SEPTEMBER, 1857.

No. 3.

"DE BURG" EXCELSIOR! GUANO EXCELLED BY "DE BURG."

The composition of "De Burg" is, chemically prepared Peruvian Guano, bones, flesh, blood, &c., prepared expressly to supply all soils, whether deficient or not, with the constituents to produce all crops, and at the same time improve them; no kind of guano can do this, as it does not contain the requisites within itself. Any one of the seven elements of De Burg are as important to the practical farmer, as either of the two which guano supplies; as a proof of this we subjoin the opinion of Dr. David Stuart, Chemist to Maryland State Agricultural Society, who inspects every lot we receive, before offered for sale, and says in his report to us:

"De Burg's compound is much more generally valuable to the practical farmer than any mixture of phosphates and ammonia or manipulated guano.

"There are other elements in De Burg to which I attach as much importance as ammonia and phosphates, and I cannot pass a cargo where one of these is absent, however much ammonia and phosphates are present."

G. J. Farish, Esq., Blackwell's, Caswell Co., N. C., writes, Aug. 4th, 1857—The land I seeded in wheat was a tobacco lot which I had in tobacco, and upon which I applied 200 lbs. De Burg per acre when I prepared it in the spring. Last fall I sowed 100 lbs. De Burg per acre, then the wheat, and ploughed both in together—the result was, I had the finest lot of wheat in the neighborhood.

I used a ton of De Burg on oats this spring, on a poor field that, without some assistance, I do not think would much more than made the seed it took to sow it—I reaped as good a crop of oats off of the land as is common to get. I have used a small quantity on corn—gill to the hill—which seems to be doing well. I have used a good deal on tobacco this spring sown broadcast on the land when bedded for hillings, say 250 lbs. per acre. No. 1 Peruvian Guano, same quantity and in same way, was used, and I am unable to discover any difference in the growth of the tobacco. Many of my neighbors used De Burg on oats and tobacco the past spring.

Edw. King, Esq., Hampton, E. City Co., Va., writes, 26th July, 1857—I applied last fall to my wheat, De Burg at the rate of 168 lbs. per acre, harrowed in, and the wheat afterwards cultivated in; along side of it I applied 164 pounds of No. 1 Peruvian Guano in the same way. The growth of straw was in favor of the Peruvian Guano, but the difference if any in grain, was in favor of De Burg. I am pleased with De Burg, and prefer it to the guano, and shall use it on my wheat this fall. I also applied De Burg on my corn this spring, in the drill, 200 lbs. per acre, with decided advantage up to this time.

A. P. Giles, Esq., Scottsville, Albemarle County, Va., has used De Burg, which he bought of us, for several years, spring and fall, in Baltimore Co. and in Virginia, and says, 24th July, 1857—I used 5 tons of De Burg on my Wheat crop last fall, and altho' I have not threshed my grain, I am satisfied the yield will be fully equal to No. 1 Peruvian Guano, sown on part of same field, and in like quantity per acre as the De Burg. I applied the latter both in the drill and broadcast, at the rate of 150 pounds to the acre in the drill, and 250 pounds broadcast, but decidedly prefer the application by the *drill* of the *smaller* amount, and the line of distinction could be plainly seen up to harvest, in favor of the latter mode of sowing.

I applied De Burg to my Corn this spring, with decided advantage, and that portion of my crop is much ahead of that where no fertilizers were used.

D. J. Hurtsook, Esq., Howardsville, Va., applied "De Burg" (which he procured of us) on his Wheat last fall, side by side with No. 1 Peruvian Guano, and says, 21st July, 1857—The crop was as heavy on land regarded as of the same quality, from the use of one as the other. I am not prepared to express an opinion as to which is the best fertilizer.

Geo. Long, Esq., Adams' Co., Pa., has used De Burg several years, says July 30th, 1857—Last fall I sowed the De Burg and No. 1 Peruvian Guano broadcast, each at the rate of 150 lbs. per acre, *harrowed* in with the wheat. I could see no difference between the two at any time. Where the guano was put, the land is much the best, therefore I think the De Burg is much the best fertilizer, not only for crop growing, but for improving the land. I shall want another supply by the 1st of September.

H. W. Fitzhugh, Esq., Baltimore County, Md., says, 27th July, 1857—I have used De Burg on Corn in the hill, and on Oats, Grass, and Wheat, broadcast. I have used the article liberally, say from 150 to 250 pounds per acre, not however, as an experiment, strictly speaking, as I consider the reputation of De Burg as an economical and efficient manure, in a concentrated form, established, I use it with same confidence as Barn yard Manure. My crops have been quite satisfactory; my Wheat this season much better than I had any right to expect, and those now growing look well.

John Jay, Esq., Harford County, Md., says, 20th July, 1857—I have no cause to be otherwise than well pleased with De Burg. I applied it last fall *harrowed* in, with seed Wheat, from 250 to 350 pounds per acre, on several kinds of soil from stiff clay, to sandy, and found its action to be on each and all satisfactory. I expect, hereafter, to apply "De Burg" whenever a deficiency may occur in my supply of barn-yard manure.

J. M. Jacobs, Esq., Bel-Air, Harford Co., Md., has used De Burg for several years on his spring and fall crops—last year he made an experiment with it, and a manipulation of Peruvian and Mexican Guano on his wheat, and says, 14th Aug., 1857—"I could see no difference in my wheat between the "De Burg" and manipulated Peruvian and Mexican Guano, (same amount in money per acre.) I also used the De Burg on corn, oats and tobacco, and prefer it to Peruvian Guano, because it is better for the following crop of grass. As a top dressing for grass, it acted finely this spring, and the effect is plainly to be seen on the second crop."

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J. W. Caldwell, Esq., Cecil County, Md., says, 23d July, 1857—I applied De Burg last fall to my Wheat, about 300 pounds per acre, along side of which upon the same kind of soil, in the same condition, I applied the same quantity of No. 1 Peruvian Guano, and the result proved to be the same—I could discover no difference either at the time of growing, or at maturity—my mode of application was simply to sow it at time of seeding, and harrow in. I have quite as much faith in De Burg as a fertilizer as in Guano.

James Frist, Esq., Cecil Co., Md., says, July 28th, 1857: I consider your "De Burg" equally as good as the No. 1 Peruvian Guano. It is impossible for me to discover any difference between the two. I sow the De Burg broadcast over the ground with my wheat, and harrow them both in together; the quantity I use is 300 lbs. per acre; on corn ground I seed on the sod, and plow it in—I put the same quantity per acre as above. I have a very high opinion of De Burg as a general manure.

John H. Gemmill, Esq., Chestertown, Kent Co., Md., says, 23d July, 1857—I applied De Burg and No. 1 Peruvian Guano to my wheat last fall side by side in same field, and think the De Burg equally as good as the guano, and will produce as good a crop of any kind of grain. I have taken several gentlemen to the field to look at the wheat, and they give the De Burg wheat the preference. They were the same persons who told me I did wrong in buying De Burg; they are now convinced that it is the cheapest manure, and will yield as much grain per acre.

Dr. Robt. F. Tubman, Dorchester County, Md., says, July 21st, 1857—Last fall I applied 200 lbs. of De Burg per acre on my fallow—a white oak clay land—and from the appearance of the wheat on the ground, I shall make double the quantity that I ever made before. As to the quantity per acre, I cannot say, as I have not threshed yet; the clover I seeded this spring is very fine.

I applied it this spring on a poor light sandy soil, tablespoonfull of the De Burg to a hill of corn, dropped my corn and covered it with the harrow, and so far, it promises to be a luxuriant crop. I will say, it will bear double any corn that I have ever raised on this field. My neighbors say it is as good, if not better, than any in the neighborhood. I greatly prefer De Burg to Peruvian Guano, and consider it a more permanent manure.

Hooper C. Hicks, Esq., Dorchester Co., Md., has used De Burg and No. 1 Peruvian Guano side by side for the past three years, spring and fall, and is now satisfied that "De Burg" is far superior to any crop, more durable and fertilizing, and 25 per cent. cheaper than Peruvian Guano.

S. B. D. Jones, Esq., Quantico, Somerset, Co., Md., says 5th Aug., 1857—Last fall I used 2 tons of De Burg, and 1½ tons of No. 1 Peruvian Guano. The land was fallowed up, harrowed with a heavy "drag," rolled and laid off in lands 8 feet wide. The field is of three different kinds of soil, clay, clay and sand, and yellow sandy soil. After seeding my wheat, the De Burg and guano was sown at the rate of 150 lbs. per acre, alternately, 10 lands each throughout the field ploughed in with the wheat 2½ to 3 inches deep, harrowed and rolled. I could not discover any difference between the guano and De Burg on the clay and clay and sandy land; but in the light and sandy part of the field, De Burg was decidedly the best. My opinion is, De Burg is much better on light, sandy land than guano, and equally as good on other soils, and of course much the cheapest.

My crop of wheat was very good, notwithstanding the hard winter—the grain is very large. There might be much said in favor of De Burg, but it is much better for every farmer to try it, and know for himself.

Barnes Compton, Esq., Port Tobacco, Md., writes, Aug. 6th, 1857—I have used "De Burg" upon wheat on three occasions, with all the success I could have anticipated or desired. I first applied it on desperately poor land (fallowed.) The land was not measured nor the De Burg weighed. I suppose I put about 400 lbs. per acre. The land was plowed, the wheat and manure scattered upon it, (without any other preparation,) and harrowed in—the crop of wheat was the best I ever made, and I believe equal to any I ever saw in this county. At the same time I applied about 300 lbs. of No. 1 Peruvian Guano to the acre, the preparation of the land and mode of application the same; character of the soil to all appearances identical with that upon which De Burg was applied. The wheat from the De Burg was much the best, the crop of clover better, and the second crop of wheat, (now in my field,) from the same land, having fallowed it again last fall, without the application of any manure, incomparably better. In a word, I consider the land upon which the De Burg was put improved, while that upon which the guano was not better than previous to the application. I have since De Burg twice upon wheat, (on land after corn,) and obt. ned each time, what I may with truth characterize as a splendid crop.

Jno. M. Smith, Esq., St. Mary's Co., applied De Burg on his wheat in 1855, and again in 1856, both times with marked effect, superior to No. 1 Peruvian Guano, same number of pounds per acre: considers it much cheaper than guano and more fertilizing—intends using De Burg again this fall for his wheat.

Robt. Clark, Esq., Prince George's Co., Md., says, 23d July, 1857—I used De Burg and No. 1 Peruvian Guano, on land seeded in wheat last fall, in the same field, using 200 lbs. of De Burg by sides of 300 pounds of guano, put in with the plow and at the same time. The wheat was decided better where the De Burg was applied; also the clover is well set. Whereas, where the guano was used, there is no clover to be seen. As a fertilizer, I consider De Burg superior to guano.

Col. W. W. Bowie, Eglington, Prince George's Co., Md., says, July 24th, 1857—I have used De Burg for two or three years past on potatoes and corn, by dropping part in the hill, and the rest broadcast at the first working of the crop. With me, it has always far surpassed the best Peruvian Guano, as a crop grower, and especially as a lasting fertilizer. As a corn producer it is great. The results from its use in this neighborhood the present year have been astonishing.

Wm. C. Diamond, Esq., Montgomery Co., Md., writes, Aug. 10th, 1857—On my wheat last fall I drilled in 150 pounds of De Burg per acre, and for the purpose of testing its virtues, I applied the same number of pounds of No. 1 Peruvian Guano, on land. The wheat manured with the "De Burg" was equal, if not superior to that manured with the Peruvian Guano—I not only noticed it, but several of my neighbors also.

Henry Bussard, Esq., of Mt. Airy, Carroll County, Md., says, July 4th, 1857—We have the most glowing accounts from not less than fifty Farmers, to whom we sold De Burg this spring, of its superior virtue over Guano and every other Fertilizer used by them on Corn. I used some on early planted Corn this spring, it is as high as my shoulders—heats anything I ever used on Corn—I only know of two men who used De Burg on their W heat last fall in my immediate neighborhood. They say it is fully equal to the best Peruvian Guano for Wheat, and decidedly better for any summer crop, as it sustains the crop much better in a drought than Guano.

Baker II. Simmons, Esq., Frederick Co., Md., says, Aug. 4th, 1857—In reply to your enquiries, it gives me much pleasure to inform you, that pound for pound of your De Burg is quite as advantageous as the best No. 1 Peruvian Guano. I have tried it twice on wheat, and found it producing fully as large a yield, and lately I have tried it on my tobacco, and so far, it seems to me, to be quite the equal of the Peruvian Guano. One decided advantage it possesses is, that it is cheaper and less troublesome.

Alex. Maxwell, Esq., Frederick Co., Md., writes, Aug. 11th, 1857—In the fall of 1855, I applied the De Burg and No. 1 Peruvian Guano on my wheat, 200 lbs. per acre, side by side. The Peruvian Guano grew the most rapid in the fall and the next spring, but at harvest the De Burg was equal to it, and I could not perceive any difference in the quantity or quality of grain in either case. In the fall of 1856, I applied them again WITH THE DRILL, 150 lbs. per acre, and mixed the guano with plaster, as my soil is blue slate. The De Burg went ahead, and kept it, all the time, and at harvest was decidedly the best.

Geo. W. Blessing, Esq., Frederick Co., Md., writes, Aug. 12, 1857—I used De Burg and No. 1 Peruvian Guano, side by side last fall on my wheat with a drill, 250 lbs. per acre of each. I consider the effects of De Burg much better than the guano, about \$15 per ton cheaper, and more fertilizing.

FARMERS, TAKE NOTICE!

Notwithstanding the great success of De Burg heretofore, as a rival of Peruvian Guano, Mr. De Burg has increased the fertilizing properties of his compound, for our fall sales, fully 50 per cent. We now challenge the world to produce its equal, at the same or an approximate price.

De Burg is the only fertilizer that is inspected in Baltimore, (except guano as it comes from the Islands,) and is guaranteed of uniform quality—not sold upon the representation of the manufacturer, as is the case with all others, but subject to re-inspection at our expense, if not as represented.

The genuine De Burg is in barrels, with white heads, maker's name in black letters, and Baltimore Inspection mark in red letters thereon—none other genuine.

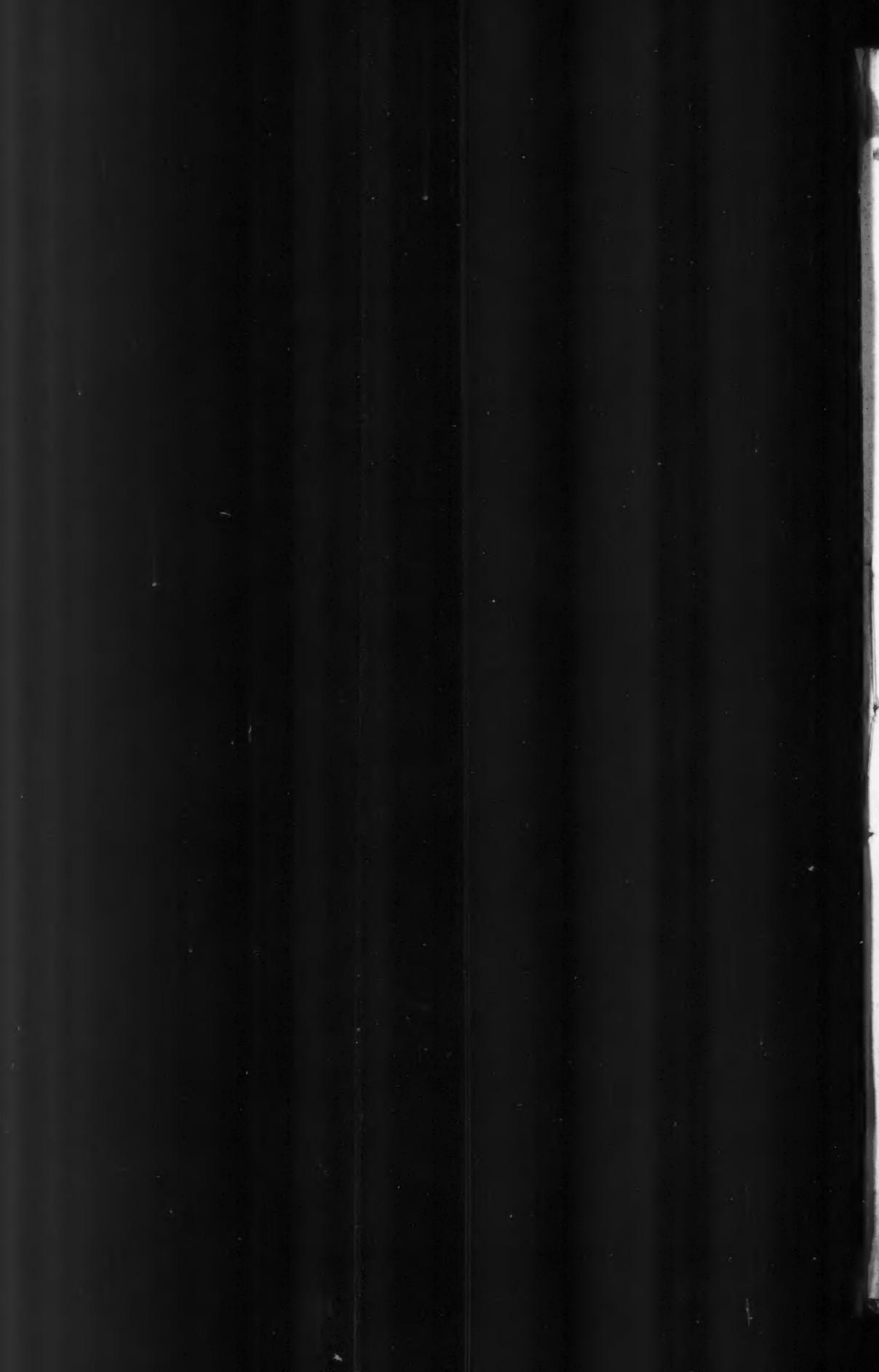
PRICE \$45 PER TON OF 2,000 LBS.

For Sale by

J. J. & F. TURNER,
42 Pratt Street, Baltimore.

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No. 3.

WORK FOR THE MONTH. SEPTEMBER.

In the hope that our advice may be availed of, we shall briefly call attention to such matters on the farm as should be attended to during this month, and as timely action is conducive to success, we will remark the sooner that they are attended to the better will the results prove.

RYE.

If circumstances have occurred to prevent you from getting your rye seeded, make an effort to get it in by the 10th of the month,—and in preparing your land don't presume that because rye will grow with less manure than wheat, that it can grow a productive crop without any. If you look to your rye crop for profit, you must feed the earth in order that there may be something therein to afford sustenance to the rye plants during their growth, as well as for the formation of the grain.

Of Manure.—With regard to manure, we will as a general thing remark that about one-half the quantity requisite to grow a good crop of wheat, the season permitting, will ensure a good crop of rye.

Preparation of the Ground.—After manuring, plough the ground deep, and thoroughly pulverize it, before sowing the seed.

Quantity of Seed per acre.—Sow 5 pecks per acre.

Sowing and Covering.—Sow broadcast and cover with the harrow about 2 inches deep; first harrow furrow-wise and then crosswise, then make your water furrows carefully, so as to carry off the water and prevent its lodgement, and roll across them.

Preparation of the Seed.—Soak them in a strong solution of salt for 12 or 24 hours, draw off the brine, and dry the seed in *freshly staked lime*.

Time of Sowing.—As before suggested, get your rye in by the 10th of the month, if possible.

CULTIVATION OF WHEAT.

As we entered fully into this subject last month, we feel that we cannot do better than to refer you to the remarks that we then made.

CLEANSING GRANARIES—DEFENCE AGAINST WEEVIL.

Before storing away your wheat, you should cleanse your granaries: for the mode we refer to our remarks last month. But as we consider the cleansing of granaries worthy of attention, we will premise that however effective the mode of destroying the weevil recommended by *M. Caillat*, we think that previous to relying upon it the granary should be thoroughly cleansed. In the first place, the floors, walls and ceiling should be carefully swept, the dirt, cobwebs and insects gathered and burnt—not swept out of doors. Then the entire interior of the

granary should be scoured with hotley, made strong, and when dry the whole room, from floor to ceiling, should be white-washed. Such a cleansing would probably destroy the weevil that proves so destructive to stored grain.

We have seen it stated that by sprinkling lime through the grain, it would preserve it from the ravages of the weevil.

The following plan is the one pursued by the late Hon. Wm. Carmichael, a former resident of Queen Ann's county of this State. We published it in 1848, and since; but as it is one of those things that will bear repeating, we republish it for the benefit of our readers, and especially of our new subscribers; and we do so with the more pleasure, as it proceeded from a gentleman of great agricultural experience, close observation, a lover of truth, and hence to be implicitly relied upon. In his letter to us, he says:—

"I last summer saw some publications in your paper in relation to the weevil-fly and *Black Weevil*. The weevil-fly deposits its egg in the grain in its green and tender state. If the wheat is threshed soon after harvest, and thrown into bulk, it undergoes a heat which destroys the egg, and it sustains no injury; but if it remains long in the shock or stalk, the weevil hatches and makes its way out of the grain to its great injury, both in weight and quality. One degree to the North of us, this pernicious insect is but little known. Here I have sometimes marked its absence for several years; but, after a mild winter, they generally appear. In the more southern States I believe they are never absent."

"The *Black Weevil* haunts our granaries, where they are generated. Some years ago I suffered much injury from them, but have now an *effectual defence*. When my granaries are clear of grain, I place powdered brimstone in an earthen pan, which, for safety I put on the floor in a bed of sand, closing doors and windows, and fire it,—the smoke either destroys or drives them off."

LATE POTATOES.

Keep these clean, and at the last working top-dress them as advised last month.

FENCES.

Personally examine all your fences, panel by panel, and have all necessary repairs made, as weak points provoke the attacks of stock when stinted for pasture, as they mostly are at this season of the year.

TURNIPS.

If of sufficient size, thin them out so as to stand about 8 inches apart.

POULTRY HOUSES.

Have these cleansed. And as the manure is a most excellent fertilizer, the droppings of a single hen in a year being computed to contain all the elements of 20 bushels of wheat, if its

virtues are properly economised, it becomes a matter of interest to every wheat-grower to save all of it he can. It would, therefore be good policy to have the droppings in the hen-house scraped off weekly, put into a barrel slightly covered with a dusting of plaster or pulverized charcoal, and kept under cover in a dry place.

Attention to such small matters, ensure big results. From 600 to 800 lbs., if properly managed, will be found a full dressing for an acre in wheat, while no better manure can be applied to fruit trees, or to any of the grain crops.

THRESHING OUT GRAIN.

Attend to our remarks upon this head of last month.

SHIPEE.

Keep a supply of salt under cover, accessible to your sheep at all times.

MILCH-COWS AND 2 YEAR OLD HEIFERS.

Our remarks in relation to these animals made last month are equally applicable to them this month.

MATERIALS FOR COMPOSTING.

No one can tell the vast quantity of good manure that may be accumulated in the course of a season, but he who may have made a trial,—and we therefore recommend to each cultivator of a farm to employ a team and hand from this to the end of autumn, in the collection of rough materials, and in the forming of compost heaps. Labor thus bestowed this fall, will bring you back principal and interest, next year. There are materials enough on and around your place, if properly economised to go over your entire lands appropriated to spring crops. Then, we ask, why should you permit them to go to waste? Say not that you cannot spare a hand; for such employment would put more money in your purse than anything else that you could put him to, as it would enable you to make two barrels of corn next season where you make but one now. Believe us when we tell you,—that the making of manure heaps should be the first duty, the first object of every farmer, as mould is an essential constituent of every fertile soil,—indeed no soil can be fertile without it.

DESTRUCTION OF RATS.

Before housing the grain crops of the present year, it would be well for you to destroy the rats that infest your premises, and to aid you in this desirable undertaking, we give below a few recipes:

1. From a paste or dough with flour, with a few sweet almonds bruised and mixed together with a small quantity of molasses, add a few drops of the oil of aniseed, cut the dough into small pellets and spread it in the resort of the rats. Feed with this 5 or 6 nights, until they take it freely; never giving them more of the mixture than they will eat up clean. Then add a teaspoonful of carbonate of barytes to 1 lb. of the paste, and you may rely upon getting rid of the rats.

2. Lay a few fresh fish in the resort of the rats for 5 or 6 successive nights. Rats are excessively fond of fresh fish and will devour them with avidity; and to ensure the destruction of the greatest number of them at once, it is best to bait them a few nights with the fish alone; then sprinkle arsenic over the fish, and the rats will unsuspectingly get their quietus.

3. Mix 1 lb. of wheaten flour, $\frac{1}{2}$ lb. powdered

sugar with 1 ounce of dissolved phosphorus, and water enough to form the mass into dough, form it into pills the size of a pea, roll the pill in dry flour. A couple of the pills may be thrown into each rat hole, or place the whole on plates in any dark room where the rats abound.

5. Mix $\frac{1}{2}$ ounce of *Nux Vomica* with $\frac{1}{2}$ lb. of oatmeal, form the mass into dough, make pills out of the dough the size of a pea, scent them with *Oil of Rhodium*, and place them where the rats abound.

6. Cut a cork up into small pieces about the size of a duck shot, fry the cork in lard until brown, then place it where the rats abound.

To show the importance of making every effort to destroy rats, we will state, that it has been computed by an intelligent English author, that a full grown rat will consume half a peck of wheat in a week, to say nothing about his injury from soiling that which he does not eat. Now if a rat destroys only half the quantity above named, his destruction is of vital importance, and should be considered sufficient to enlist whole neighborhoods in the good work of exterminating the whole race.

SETTING TIMOTHY MEADOWS.

Upon this subject we refer to our remarks of last month, p. 42.

PASTURES.

Those who have pastures for their stock, should, in the course of the fall, dress them with a mixture, per acre, of 5 bushels of ashes, 1 bushel of lime, 1 bushel of salt and 1 bushel of plaster, and harrow the mixture in.

MEADOWS.

If your meadows are old and turf bound, you may greatly improve them, by giving them a good harrowing, sowing thereon 5 bushels of bone dust, 5 bushels of ashes, 1 bushel of salt and 1 bushel of plaster per acre, and by sowing 1 gallon of timothy seed per acre. This done, roll and harrow the whole in.

PLANTING OUT A YOUNG ORCHARD.

If you intend setting out a young orchard this fall, though too early to set the trees out now, it is full time that you should be preparing a compost and getting the ground in order, if you desire that the trees should thrive, do well and the orchard prosper.

The soil in which a young orchard may be planted cannot well be too carefully prepared. It is thought best that the ground should have had the advantage of a year's previous cultivation in corn, potatoes or some other crop requiring cleanly culture. But if the acre you design for your orchard has not had this advantage, you may still get it in good condition to receive your trees, between this and the time for planting them out.

The land should be both *ploughed* and *subsoiled*, early this month, harrowed and left to mellow. It should be ploughed 8 or 10 inches in depth, and subsoiled as deep as the subsoil plough can be made to penetrate the earth. This done, prepare a compost consisting of mould and leaves from the woods, marsh mud, river mud, and the scrapings of wood-yards, of roads, of ditches, headlands and any similar substances. To every 20 two-horse cart loads of the above substances, add 5 two-horse loads of barn yard manure, 50 bushels of ashes, 5 bushels of salt, and 5 bushels of bone-dust; prepare the compost layer and layer about; mix the materials all well together, form it into a heap and let it remain until within a few days before you intend planting out

the trees; then shovel over the compost and haul it out upon the land. Broadcast evenly upon each acre 20 or 25 two-horse cart loads, plough it in 8 inches deep, reserving enough of the compost to give to each tree about half a bushel, which must be intimately mixed with the surface mould dug out in making the hole for the reception of the tree.

In making the holes, which should all be made before the trees are taken to the ground, have them of sufficient width to accommodate the roots without any cramping, say 6 feet diameter. In digging the holes, throw the surface soil on one side to be mixed with the compost, and the subsoil on the other. Dig the holes about 2 feet deep; fill them up with the mixture of surface soil and compost, so as to leave a depth sufficient to enable you to insert the trees about the same depth that they originally stood in the nursery. As you are about to insert the trees, examine the roots; if any are broken, or seriously injured, cut them off smooth. Before placing the tree in the hole immerse the roots in a mixture of the compost, made into the consistence of cream with water. In planting have the roots spread out regularly; then, while one man holds the stems of the tree perpendicular, let the other spade or shovel in the mixture intended for covering, occasionally moistening the earth in the hole with water from a watering-pot, and gently pressing the earth around the tree with his feet, firmly, but not too hard. A stake must be placed to each tree, to tie the stem to before filling in. In filling up, it will be best to leave the ground slightly basin-shaped about the surface and around the tree. In finishing give to each tree a watering-pot of water, gently poured out, having first tied the tree to the stake with a whisp of straw, or other soft bandage, to prevent chafing and injury from the winds.

Recollect that, in setting out an orchard, you are doing a thing that is to last for life, and, therefore, that you should do it well; and that a little extra trouble, care and expense, at the beginning, always turn out, in the end, enlightened economy.

In the selection of your trees, have regard to a just proportion of summer, autumn and winter fruit; get the best sorts, and of those kinds that are known to suit the latitude and climate of your location.—There are varieties of apples which bear well, produce delicious fruit, in certain degrees of latitude suited to their habits and constitutions, which on being translated only a few degrees further North or South, prove insipid, worthless and unfruitful. Some of the Northern winter apples, prove to be autumn ones when grown South. You should, therefore, bear these facts in mind in making your selection, and make your purchases accordingly. And be sure that you buy of none but a nurseryman of well established reputation for skill in his business, honesty and fairness in his dealings.

We have deemed it to be our duty to our agricultural friends, to give the preceding caution, as there have been many sad impositions practiced by *sharers* who sometimes peddle trees about the country. And we conclude by admonishing our friends that **TREES PEDLARS ARE NOT THE MEN TO BUY FROM.**

CELLARS AND OUT-HOUSES.

Have these cleansed and white-washed.

DITCHING AND DRAINING.

As no lands which are wet can possibly do justice, either in the quality or quantity of their products, if you have a field in that condition, make all necessary arrangements, and have it drained this fall.

LIMING AND MARLING.

If you have a field that you think requires the application of lime or marl, do it early this fall.

WORK IN THE GARDEN.

SEPTEMBER.

We shall without preface proceed at once to point out the things that should be immediately attended to.

Sowing Cabbage Seed.—It has been our custom for years to call upon our readers to sow cabbage seed of different sorts early this month, with the view of raising plants to be set out in the early part of November. Our object in doing so, is, to induce you to lay the ground work of a supply of cabbages for your family early next summer and through Autumn, and we therefore repeat our advice again.

Preparation of the bed.—Select a spot on an openly exposed border, or part of a similarly exposed bed; manure it well, dig in the manure a spade deep, rake until you obtain a perfectly fine tilth, then divide it into as many parts, as you have different sorts of cabbage seed. This done sow each kind separately, rake the seed very lightly in, then put down the earth gently with the back of your spade, so as to bring it immediately in contact with the seed to quick germination; then dust the bed with a mixture of 4 parts ashes, 2 parts soot and 2 parts plaster.

The following varieties will ensure a continuous supply of fine delicious cabbages from early summer next year throughout autumn, viz:

Early Imperial, Early York, Early Nonpareil, Early Vanak, Early Sugar Loaf, Large York, Flat Dutch, and Large Ox-heart.

If the weather should not be seasonable at the time that you sow the seed, give the bed a free watering; continue this every evening until the plants come up and until rain occurs. Just as your plants get above ground dust them with a mixture of 4 parts ashes, 3 parts soot, and 1 part flour of sulphur, first having watered the plants, so as to make the mixture adhere to the leaves. Repeat this two or three successive evenings, and you will protect them from those insects that so frequently destroy them. Should your plants not grow vigorously, water them three or four successive evenings with the following decoction. Put half a bushel of horse-dung into a barrel, together with 1 quart of soot and 1 oz. of sulphur tied in a bag; pour hot water thereon, and when the water becomes cool fill up the barrel with cold water, and in 24 hours it will be fit for use. The barrel may be filled up several times. In six or eight weeks the plants will be large enough to be set out to stand the winters.

Sowing Cauliflower Seed.—From the 20th to the last of this month will be a good time to sow Cauliflower seed. Select a rich, well exposed spot on your border, about 5 or 6 feet long. Manure it liberally with well rotted dung, dig the dung in a spade deep, rake the bed well, sow the seed thinly, rake them in lightly, pat down the earth gently with the back of the spade, then give the bed a free watering, gently applied from the rose of a watering pot. And afterwards treat them precisely as recommended for cabbage plants.

In about 4 weeks they will be large enough, when they must be removed into garden frames and planted about 3 or 4 inches apart, to remain during winter.

Spinach Bed.—Hoe and clean out all grass and weeds from your spinach bed.

In the beginning of this month, prepare a bed in a dry situation, by manuring generously, digging in the manure, and raking perfectly fine. Make drills 12 inches apart, 1 inch deep and drill in the seed thinly. When the plants are large enough to admit it, thin them out so as to stand 4 inches apart in the drills. Treat the plants as recommended for cabbage plants and you cannot fail to have a supply for winter and spring.

Lettuce.—Such of your lettuce plants as are large enough for heading should be planted out.

Select a warm southern exposed border and sow seed, early this month.

Small Salading.—Seed of all kinds of small salading may be sown during this month. It would be best to sow at intervals of ten days apart.

Turnips.—Weed your turnips, and thin them out so as to stand 8 inches apart.

Celery.—Earth up your celery for bleaching as often as its advance in growth may require it.

If your late plants are of sufficient size transplant them in the trenches.

Radishes.—During the first week of this month sow white and black radish seed

Endives.—Set out your endive plants early this month, the earlier the better.

Siberian Kale.—Now, as this is a most delicious vegetable, we feel desirous that you should put in a bed of it, and, in the hope that you will gratify us, and thereby secure to your family a full supply for next spring's use we will tell you how to grow them. If your bed is 40 feet square 2 oz. of seed will be sufficient.

Preparation of the bed.—Select a dry loamy bed, then spread on it 3 inches in depth of stable or barnyard manure, dig it in a spade deep, rake finely as the spading goes on, then top-dress the bed with 2 bushels of ashes and 1 quart of plaster, and rake that in. This done mix your seed with a half gallon of sand and sow them thinly. Then rake them in very lightly, and compress the earth around them very lightly with the back of a shovel. This done all the work necessary will have been performed, except a drought should intervene, in which event, the plants will require watering.

Culinary and Medicinal Herbs.—These may all be set out any time during this month. If the weather proved dry they must be watered every second or third evening, until rain occurs.

Gathering Seeds.—As your seeds ripen have them gathered, and dried on sheets in an airy, shady place. When dried put them into paper bags and mark them, so that you may know each kind.

Strawberries.—As the strawberry is a delicious and healthy fruit and should be grown in every farmer's garden, if you have not a bed in your garden, plant out one during this or next month.

Budding and Inoculating.—These operations may be continued during the two first weeks in this month.

Weeds.—Examine your garden and make your gardener pull up all tap-rooted weeds, and exact of him never to let a weed go to seed within your garden enclosure.

General remarks.—See to it that your gardener keeps all your vegetables clean from weeds and grass, and that, in dry weather, he does not permit any vegetable to suffer for the want of water.

DELEGATES TO STATE SHOW.—The N. Y. State Agricultural Society have appointed Wm. Kelly, E. G. Falle, Jon. Thorne, and B. P. Johnson, Esqrs., as Delegates to the Maryland State Show, in October.

FLORICULTURE—September, 1857.

Prepared for the American Farmer, by W. D. Brackenridge, Florist and Pomologist, Govanstown, Balt. Co., Md.

Dahlias., will now be in full bloom, thin the buds, when large fine flowers are wanted; attend to removing all suckers.

Roses, towards the latter end of the month, prepare a mild hot-bed, cover the surface about four inches thick, with clean fine sand, in which insert cuttings; or plant the cuttings in shallow boxes, filled with sand, and place the boxes on the bed, shade and water moderately for a few days, and in two or three weeks they will have made roots, when they should be potted in two inch pots; layering and budding can yet be done to advantage.

Canterbury Bells and Sweet Williams, raised from seeds this season, should now be planted out in the border or beds where they are to bloom next summer.

Greenhouse Plants, if they have not already been examined, and those requiring it shifted into larger pots, should be attended to without delay; examine the plant house and have all damage in the flues, staging, gangways and glass repaired, wash the walls inside with hot lime, to kill insects, and give the whole a thorough cleaning before housing the plants.

Carnations and Picotees, rooted layers of these should now be taken up and potted, or planted out in beds where they are to bloom next year; cuttings of the monthly blooming kinds if inserted in sand and moderately shaded, will now root freely.

Oxalies, Sparaxis and Ixias, a portion of these can now be potted for early spring bloom.

Petunias, put in cuttings of all the fine varieties, and save seeds of the same, from which to raise new sorts.

Verbenas, strew a little earth on the young shoots, this will cause them to send forth abundance of roots, so that strong plants may be got for potting in October.

Camellias, should be housed in the early part of the month, when they should get air both night and day in warm weather; at the same time use the syringe freely, watering but moderately at the roots.

Wallflowers and Stocks, towards the end of the month, should be lifted and put in pots, place them in a cold frame and shade for a few days.

Callas, divide and repot these as soon as possible.

REPORT ON COLOMBIAN GUANO.

BY PROF. SAMUEL W. JOHNSON,

Chemist to the Connecticut State Agricultural Society.

HENRY A. DYER, Esq., COR. SEC.—Dear Sir:—The material which has been introduced into our agriculture under the name of Colombian Guano, and which is likewise known as phosphatic Guano and native Super-phosphate of Lime, is found on certain islands of the Caribbean Sea. It occurs as hard stony masses, variable in structure, color and composition. The rock that is richest in phosphoric acid is concretionary in structure. Externally its color is gray and white, internally brown or black. This rock though quite rough under the hammer, may be readily reduced to a fine powder, having a yellowish, or brownish gray color, and in this form it now appears in the market. This guano is probably formed from the excrements of gulls, pelicans, and cormorants, which are the sole inhabitants of the islands, where the deposits are found. These islands are a hundred

or more in number, and it is said that guano exists there in enormous quantities. The rock guano consists essentially of phosphates, but is more or less intermixed with other mineral matters. It contains but a trifling amount of ammonia or of ammonia yielding substances.

The composition is seen from the following table. Analyses 1, 2, 3 and 4 were made in the Yale Observatory. 1 and 2 on a specimen of ground guano received by Mr. Weld from the Philadelphia Guano Co., which owns the guano. No. 3, on an unground piece of rock from the same source. No. 4, I procured from a correspondent near Philadelphia. Nos. 5, 6, 7 and 8 are analyses made by Wm. J. Taylor, of Philadelphia, on rock samples, furnished him by Dr. D. Luther, Pres. of the Phil. Guano Co. (See Proceedings of the *Phil. Academy of Natural Sciences*, March 1857.) No. 9, is an analysis by Drs. Higgins & Bickell, and represents a commercial article.

further prosecution was rendered unnecessary by the appearance of Mr. Taylor's extended investigation.

It is of the utmost importance that a fertilizer have a uniform and constant composition. The gentleman who furnished me with the material for analysis No. 4, inquired of me before that analysis was made, which would be the cheapest source of phosphoric acid, Colombian Guano at \$25, or Bone Black at \$30 per ton. I replied that if the Colombian Guano he procured was as good as the samples I had then analyzed, it would be cheaper than the average quality of bone-black. The guano I rated to contain 40 per cent of phosphoric acid, while bone-black averages about 35 per cent at the above stated prices; both materials would yield a pound of phosphoric acid at nearly the same cost; but as bone-black may contain 10 or 15 per cent of carbonate of lime, which is injurious in the preparation of super-phosphate, it was concluded that the Colombian Guano was the cheapest. In order to satisfy myself, analyses were made of both the guano and the bone-black. The guano contained, not 40, but 33½ per cent of phosphoric acid; and the bone-black contained 35 per cent. of carbonate of lime. It appears, therefore, that the purchaser is dependent for a good article, upon the honor and care of the Company unless he protects himself by an analysis!

The quality of Colombian guano deserves this praise, that it is the richest known source of large quantities of phosphoric acid, if, indeed there are large quantities of the best quality. But bone black or bone-ash is equal in this respect to the average of the good samples hitherto analyzed.

Solubility of the Phosphoric Acid. The circulars of the Philadelphia Guano Company give an analysis of this guano by Dr. Chilton, according to which it contains 13.14 per cent of soluble phosphate of lime. J. C. Booth reports therein that the Colombian Guano contains 6.05 per cent of free phosphoric acid, or 32.27 per cent of soluble phosphate of lime. Dr. David Stewart, Chemist to State Agricultural Society of Maryland, in an analysis he furnishes, makes it to contain 5.23 per cent of soluble phosphoric acid. Dr. A. A. Hayes of Boston, in his analysis states it to yield 11.4 per cent of phosphoric acid more than is requisite to form bone phosphate of lime. He says it is in fact a kind of natural Bi-phosphate of lime. J. C. Booth in the analysis of another sample, finds 9.6 per cent of free phosphoric acid. On the strength of these statements the Colombian guano has been called a Native Superphosphate of Lime. It is not difficult to understand how some of the chemists above mentioned have been led into the blunder, for it deserves no softer name, of asserting that the substance in question contains free phosphoric acid or super-phosphate of lime; but without occupying space here to explain this point, which is of no practical consequence, I may repeat the fact that it is not, and cannot be a natural super-phosphate of lime. It is true, however, that a portion of the phosphoric acid of the best kinds is in a peculiar state of combination, which is slightly soluble in water, so that by long continued washing with hot water, I succeeded in dissolving from it 2.67 per cent of phosphoric acid; but the quantity of water employed was vastly more than the same amount of guano could encounter in any cultivated soil. The analyses show that by the usual treatment which would completely separate any super-phosphoric acid, there would remain a residue of 6.05 per cent of phosphate of lime, which is equivalent to 13.14 per cent of soluble phosphate of lime.

Richness in Phosphoric Acid. In the majority of the analyses here quoted, this ingredient ranges at about forty per cent. Analyses 4, 5, and 7 show that it may fall three, six, and even eight per cent lower. Analyses 7 and 8 were made in a material quite different in external appearance from the rock furnishing the other samples. Specimens of these inferior kinds were sent to me by the Company last Summer. They appear as if largely intermixed with sand, which is the case. They contain little or no lime, and the phosphoric acid is combined with oxide of iron and alumina. When pulverized they can scarcely be distinguished by the eye from the best sorts. I had begun analyses of the specimens sent in my possession, but their

phate, only 0.8 per cent of phosphoric acid is dissolved.

Value of other Ingredients.—This guano may be considered to owe its agricultural value exclusively to phosphate of lime, as the alkalies, sulphuric acid and ammonia which it contains, are too small in quantities to influence its fertilizing powers perceptibly.

Commercial Value.—I believe that the present price is the same as that of last year, viz: \$35 per ton. At 40 per cent., a ton contains 800 pounds of phosphoric acid, so that the cost of the latter is 4½ cents per pound.

Under present circumstances when the price of fertilizers is advancing, I doubt if there is a cheaper source of this invaluable manurial agent than the best quality of well-ground Colombian Guano at the rate of \$35* per ton. Although raw or boiled bones are themselves much cheaper, yet the expense of bringing them into a good state for application is considerable, so that on the whole there is but little gain in their employment.

Yale Analytical Laboratory, May 18th, 1857.

* It sells in Baltimore for about \$35 per ton of 2,000 lbs.

COLOMBIAN GUANO.

To the Editors of the American Farmer:

Messrs. Editors:—I had not intended to trouble your readers again with my lucubrations on this subject, but the recent publication of the views of Prof. Johnson, has induced me again to lay before the farmers what I believe to be the facts in the case.

Prof. Johnson has, in the first place, fallen into the error of compounding together a great variety of totally different substances brought from the Caribbean Sea, to all of which he has applied the term Colombian Guano. Now, in this market, which every one knows to be the great entrepot of the phosphatic guanoes, these new varieties have never been offered as Colombian Guano. As a consequence of this error, Prof. Johnson concludes that the guano in question is very irregular in its yield of phosphoric acid. Now, as I have analyzed a number of samples of this article, all of which have been obtained directly from the dealers or the guano inspector, I think I have as good an opportunity of knowing its average composition as any one else. As the result of these analyses, records of which have been preserved, I would state that in no single instance have I found less than forty-one per cent. of Phosphoric acid in samples of ground cargoes. The specimens of the pure rock guano which I have examined, have always exceeded this. The average of the ground samples of entire cargoes has been 41.32 per cent. of phosphoric acid, the highest yield being 41.62, and the lowest 41.16. It would be difficult to find any fertilizer which can at all approximate this in uniformity of composition. The selected specimens have contained, on an average, 44.83 per cent. of phosphoric acid, the largest amount ever obtained by me being 46.22 per cent.

The characteristics of Colombian Guano to one acquainted with it are unmistakable. It is a hard, tough, rocky substance, banded with various hues of dark brown, black and russet, and coated with a white, polished enamel of varying thickness, averaging, however, about a line, or the twelfth of an inch. The substance of the rock often contains minute crystals of gypsum or sulphate of lime.

This rock has been found to be of a very constant composition, so far as its phosphate of lime is concerned. In every analysis of Monks' Island guano which I have made, I have found the phosphoric acid united with lime in the proportion of one part of the acid to two of the base, the remaining basic atoms being water. As an illustration of a variation in the constitution of the body of the rock, the following analysis of a very dark-colored specimen from El Roque may be taken. It will be seen to be essentially the same as the guano from Monges, of which so many analyses have been published.

Water and Organic Matter,	11.71
Lime, - - -	39.05
Magnesia, - - -	0.51
Phosphoric Acid, - - -	43.43
Oxide of Iron and Alumina, - - -	0.92
Sulphuric Acid, - - -	2.59
Chlorine, - - -	0.06
Alkalies, - - -	0.31
Silicious Matters, - - -	0.99

99.57

If the above figures are arranged according to chemical formulæ, it will be found after deducting the lime combined with sulphuric acid and the phosphoric acid combined with magnesia, we shall have left 37.46 parts of lime to be combined with 42.39 parts of phosphoric acid. This does not correspond precisely with the formula I assigned for this salt, on the basis of my first analysis of Monks' Island guano. Calculated according to that formula, there are 4.49 parts of lime unaccounted for. A comparison of the two analyses, however, shows that there is more organic matter in this than in the Monks' Island guano by nearly 3 per cent. If we suppose that this is made up of acids of the humic group combined with lime, we reduce the excess of lime to a point within the limits of errors of analysis, and retain the formula for Monks' Island guano. I am aware that this is mere hypothesis, but the unusually dark color of this mass from El Roque naturally suggests such an interpretation. One thing is certain, the lime does not form bone phosphate with this acid, for there is a deficiency of no less than 12 per cent. of lime if we calculate according to the formula for bone phosphate. If, therefore, we assume this El Roque guano to be a mixture of the two phosphates, we shall find what has been called the Colombian phosphate of lime to constitute by far the larger proportion of the mixture.

A very slight knowledge of agricultural chemistry will enable any one to understand the reason of the great superiority of this guano as a fertilizer over other phosphatic manures which contain only bone phosphate. With a given amount of solvents for phosphates in the soil, the neutral or Colombian phosphate will furnish to the crop more phosphoric acid than the basic or bone phosphate. If, for example, a farmer employs two manures, one containing a hundred pounds of Colombian phosphate, and the other a hundred pounds of common bone phosphate, and if he has solvents in the soil sufficient to dissolve them both in one season, he will get out of the former 56½ pounds and out of the latter only 46 1-6 pounds of phosphoric acid during the season. This calculation is based on the supposition that these two substances are equally soluble in the acids of the

soil. The truth is, however, that the Colombian phosphate is much more soluble than bone earth, so that, in reality, the soil gets very nearly one-third more from it by the simple process of solution.

This statement, however, by no means expresses the entire benefit of this guano. Bone earth, when dissolved in acids and precipitated by ammonia, goes down unchanged, while the Colombian phosphate is decomposed, into bone earth and phosphate of ammonia. Now as all soils contain both organic acids and ammonia, and as rain water contains a minute proportion of the latter substance, it follows necessarily that the joint action of the soil and the rain upon this manure will be to decompose it into bone earth and phosphate of ammonia. The latter being one of the most stable salts of this volatile alkali, the reciprocal action of the Colombian phosphate upon the soil will be to fix ammonia in it, and prevent the waste of that valuable material.

How imperfectly Prof. Johnson's table represents the true results of the examination of this guano will be seen in a moment, when we examine it critically. His table contains the results of nine analyses, four of which are his own, four by W. J. Taylor, of Philadelphia, who has just published a report of a very careful and elaborate examination of the different phosphates from the Caribbean Sea, and one by Drs. Higgins and Bickell, of this city. Nos. 1, 2 and 3, of the table, may be considered as representatives of the commercial article; Nos. 4 is evidently a mixture of Colombian and Mexican; No. 5 is Mr. Taylor's analysis of the white crust; No. 6 the same Chemist's analysis of the body of the rock; No. 7 gives the composition of a rock from Centinella, No. 8 that of a sand-stone containing wavellite from Testigos; No. 9 is Drs. Higgins and Bickell's analysis (not of a commercial article, as Prof. Johnson states, but) of a selected specimen of the rock from Monk's Island.

Let us now look at these phosphates from Centinella and Testigos. I have analyzed two specimens from the former and six from the latter island. The Centinella specimens were sent from Philadelphia, the others I took myself from the cargoes brought into this port. I am not aware that the Centinella phosphate was ever offered here for sale at all; the Testigos was not marked by the inspector Colombian Guano, and consequently could not be sold under that name.

A careful examination of these substances has satisfied me not only that they are not Colombian Guano, but that they are not guano at all, that is, if we mean to restrict that term to the deposit of birds. Colombian Guano occurs, as is very well known, as a layer of rock of variable thickness resting upon ordinary Mexican Guano. At Centinella, on the other hand, these phosphates form cliffs rising out of the sea to a considerable height, and at Testigos, they occur as large nodular masses weighing 6 ton and more. The appearance of these stones differs as widely as their mode of occurrence from that of Colombian Guano. They are coarse-grained, rough and brittle, and while presenting a slightly mammillated appearance on the parts exposed to the weather, have nothing like the enamelled surface of the true Colombian Guano. Chemically, their difference is equally great. They contain no lime, and what is more important in determining their origin, they are totally destitute of organic matter. Not to multi-

ply analyses, I subjoin two, one of the light colored variety from Centinella, the other of a red phosphate, from Testigos.

	CENTINELLA.	TESTIGOS.
Water,	23.57	16.74
Silica,	6.24	7.74
Lime,	0.75	
Magnesia,	Trace	
Sesquioxide of Iron,	29.33	12.96
Alumina,		30.91
Phosphoric Acid,	38.40	40.45
Sulphuric Acid,	0.68	0.02
Chlorine,	Trace	0.12
Alkalies	0.35	
Flourine and Loss,	0.68	1.06
	100.00	100.00

These appear to me evidently mineral substances. The phosphoric acid is combined not with lime, but with iron and alumina, and in the latter instance it seems to form wavellite, a mineral which cannot be suspected to be of animal origin. I see no reason whatever to consider such rocks as these to be guanos, except the very insufficient ones that they contain phosphoric acid, and come from the Caribbean Sea.

To return to Prof. Johnson's report. That gentleman undertakes to compare these guanos with bone black, especially for the purposes of the manufacturer of super-phosphate. He considers bone black as equal in its contents of phosphoric acid to the best varieties of Colombian Guano. That this is not the case is evident from the analyses already cited. There are also sources of loss to the manufacturer who employs bones from which he who uses Colombian Guano is exempt. There is usually from 10 to 15 per cent. of carbonate of lime in burnt bones. This must all be decomposed by the sulphuric acid before it can begin to act upon the phosphate. Of course this involves a loss of oil of vitriol, which is unavoidable. Again, the phosphate of lime in bones is made up of three equivalents of lime to one of phosphoric acid, while the acid phosphate which the manufacturer aims to produce contains one equivalent of lime and one of acid. It is therefore clear that he must use enough sulphuric acid to combine with two equivalents of lime. As the Colombian phosphate, however, contains but two equivalents of lime to one of acid, the manufacturer in order to obtain the same result, need use but one equivalent of sulphuric acid. It is therefore clear that, for the purpose of the manufacturer of super-phosphate, bones are not equal to Colombian Guano containing the same per centage of phosphoric acid.

I had intended to make some further remarks on this subject, but having already sufficiently trespassed upon your readers' patience, I shall not continue to weary them at present.

Very respectfully yours, &c.

A. SNOWDEN PIGGOT.

AGENCY OF THE AMERICAN FARMER AT RICHMOND, VA.—Peyton Johnston, Esq., has consented to act as Agent for the "Farmer," at Richmond, Va. All persons knowing themselves indebted to us, in Richmond, or its vicinity, can either hand the amount due to Mr. J., or forward it to us. Persons wishing to subscribe or advertise in this journal, can also transact the business through the same agency.

WINE CULTURE IN THE UNITED STATES.

SEVERN SIDE, Anne Arundel Co.,
August 12th, 1857.

To the Editors of the American Farmer:

I think it quite likely, gentlemen, that—in its non-fulfilment for so long a period—you have forgotten the rash promise once made to you, touching certain communications on the subject of Grape Culture, which were to have been sent from this place to the office of the American Farmer. Having indulged in vine growing, and (to some extent) in wine-making, for several years; taking a lively interest in that ancient and agreeable branch of husbandry, and intending ultimately to devote a large portion of my farm to the Grape, I did anticipate, with pleasure, that it would be possible for me to send you a letter occasionally, if only to report progress. "But man proposes, and God disposes." The rains for many moons, (as the red men poetically talk), have fallen so perpetually, and the weeds and grass have grown so pertinaciously, that we have had no time for truce or parley in the active war we have been compelled to wage upon the common enemy of our crops. Who is the reckless individual that declared, (in a late number of your journal) that Mason & Dixon's line was the extreme southern limit of the dairy region? Let him come and examine our fields—our corn and tobacco fields especially—and he will hasten to do justice to Old Maryland by placing her in the front rank of the grass-producing States. But seriously, my friends, considering that in addition to my ordinary farm business this Summer, I have assumed the responsibility of protecting the lives of about 30,000 young vines and seedling fruit trees; each one like the infant Hercules (but without his strength) threatened with strangulation at its most tender age, you will excuse my dilitoriness: and I trust, will also grant an extension of time upon that aforesaid obligation. I regard its fulfilment as one of the minor moralities, and inclination as well as civility will lead to its observance at the earliest leisure day. Meanwhile, gentlemen, I send you the July No. of "Cozzens' Wine Press"—which contains a general survey of the subject of American Wines, from the pen of the talented and patriotic Wine merchant who edits it. I hope your readers will not think that, in publishing it, you give the subject more space than its importance deserves; and I am sure there can be but few, who will not be pleased with both the manner and matter of the article. I beg you to note what the author says of sweet wines. As his opinion coincides with that to which we arrived in discussing the merits of the still Catawba of the last vintage at Severn Side, we at least will insist that his judgment of wines is as correct and fine, as is his literary taste.

If we had in our principal cities, a few more such wine merchants and editors as Mr. F. S. Cozzens, the pure and wholesome juice of the American grape would soon be in every mouth, and its praises on every tongue. It will be no light matter to reform the popular taste in this particular—so long corrupted by bad wine, bad whiskey and lager-beer—but that it will be accomplished ere long, and that too, without the aid of the *Northern Clergy* and "strong-minded women," I have no doubt. What say you Messrs. Editors to joining a *Native Wine Party?* Before you decide, however, let me suggest—as the Dog-Star now

rages—that you try a glass of iced Catawba; mellow, luscious, and though aged, yet breathing the unmistakable and inimitable perfume of the native berry. That being done, I shall not be at a loss to know how "the Old Pioneer" will speak to the question. *In vino veritas!*—that is, in pure wine; such as the Romans quaff'd—the choice Falernian of Horatian memory. Trust not the man who drinks bad wine: he is fit for treasons, stratagems and spoils. But, as your pages will be more pleasantly and profitably occupied by others, I will not now detain you longer than to offer the regards of your

WELL-WISHER.

From "Cozzens' Wine Press," (published in New York.)

AMERICAN WINES.

In Georgia, the luscious muscadines, gathered in the wild state, produce a wine of considerable merit; as yet, no attempt has been made to give them a formal training, except here and there, upon a small scale.* This is also the case in South Carolina. But here we are in a sister State, a land of promise, of vines, and pines, and mines; of tar and turpentine; the natal soil of the Isabella, the Catawba, the Herbemont, and the sonorous Scuppernong—North Carolina!

We shall have occasion to speak of the Catawba, the Isabella, and the Herbemont, hereafter; the two first, unquestionably owe their reputation to the skill of the cultivators of Ohio and New York, and have only a limited growth in their native State; but Scuppernong vineyards are found from Currituck, on the extreme north, to the southern counties on the Cape Fear River, and extend inland, almost to the foot of the Blue Ridge Mountains; while so various are the qualities of wine produced, that some kinds command three or four dollars per gallon, and some kinds can be purchased for five or six dollars a barrel! There are two species of this grape, the best having a white, silvery skin, with a rich, metallic lustre, while the inferior kind bears a small, black berry. Mr. Longworth says, "the black Scuppernong bears from one to four berries on a bunch, and would, in times of war, if lead be scarce, be as valuable, even when fully ripe, as the Fox grape, for bullets. The white Scuppernong, also, has a very small bunch, and is a better grape than the black. But the skin is thick, and the pulp hard; it will never be valuable as a wine grape, unless to give to other must aroma and flavor."

If for no other purpose than this, namely, to mix with the must of less flavorful grapes, to give character to the wine when made, this Scuppernong will prove to be most valuable to this country. The "Traminer" of the Rheingau, a small-berried grape, abounding in saccharum, and full of aroma and strength, is so used to mix with the "Riesling," the favorite grape of the Rhine, in the production of the first-class German wines. And that the generality of European wines owe their excellence to the judicious mixture of various growths and vintages, is so well known as scarcely to need repeating here. In particular, Madeiras, Sherries, and Champagne wines are so composed; the capitaz, or head butler of the Spanish *bodega*, or wine-cellars, being a most important personage, to whom is confided the exquisite task of balancing flavor against body, and lusciousness,

* Dr. Cammack, of Athens, Georgia, has quite a large vineyard, and raises quantities of grapes annually. Whether he makes wines, we do not know. There is much wine made for family use in various parts of G., from the wild grapes.

which might cloy, against acerbity, which might repel, until the whole perfected vinous mass becomes the golden potable which even gods might envy. So highly are the services of this great functionary prized, that the *capitaz* of a large proprietor seldom fails to amass considerable wealth, as an instance of which, Juan Sanchez, the *capitaz* of the late Pedro Domez, died recently, worth £300,000.

But the value of the Scuppernong as a wine-grape, has not yet become fairly tried; at least not in North Carolina. Of all the samples we have tasted, not one was the pure and original fermented juice of the grape, but, in every case, more or less sophisticated with sugar or honey, and not unfrequently with whiskey or brandy. It is usual to add three pounds of sugar to one gallon of the must, and then a little distilled spirits of some kind is poured into every barrel of wine, "to make it keep." Subjected to this treatment, the fluid degenerates into a sort of vinous grog, and its peculiar character as a wine is almost entirely lost. Still, in spite of this, it has an aroma which is somewhat grateful. This mistake must be rectified, as a larger experience obtains among our vine dressers of the South; let us look into the matter a little closer.

That species of the muscadine, called the Scuppernong, is a very sweet grape, but sweet grapes are often wanting in saccharine matter. For a familiar instance, take the Catawba and Isabella grapes. To the taste, the latter is by far the sweetest fruit; nevertheless, in making a sparkling wine, the Isabella needs a liberal allowance of sugar, while the Catawba wine requires but little. McCulloch, in his treatise on wine-making, makes a very accurate distinction between this "sweet principle," and that which constitutes the "sugar," in fruit. The latter, the saccharine principle, is the element which, by the process of fermentation, is transmuted into alcohol, or spirit of wine, a certain per centage of which is necessary in all vinous fluids. This spirit of the wine is derived directly from the sugar of the grape. Now, the difference between the sweet element and the saccharine element, is very clearly shown by Mr. McCulloch, who illustrates the subject by comparing molasses with refined sugar—the first being much the sweetest of the two to the taste, and yet not comparable to the latter in its proportion of pure saccharum. And, if we may venture upon a theory, we should say, "that the reason why sweet grapes make a wine less sweet than those not so dulcet to the taste, lies in this:—that in the sweet grape the whole quantity of saccharum is absorbed in the production of alcohol, while in those more abounding in sugar, a portion only is transmuted into alcohol; the superflux of sugar remaining in undisturbed solution, and sweetening the wine, less or more, as may be."

Now, the Scuppernong grape produces a wine naturally hard and dry, with little to recommend it but its peculiar aroma and flavor; and, in consequence, the must is artificially sweetened to make it a marketable or a saleable commodity. So long as this method of treatment is practiced, neither it, nor any other American wine so used, can rank with any wines of Europe, except with the spurious productions of Cetze, Lisbon, and Marseilles. The difficulty lies in this—*our vine growers are afraid of a hard, dry wine*,—because popular taste so far (especially in the rural districts) has been

corrupted by the sweetened, sophisticated, poorest class of imported wines, the sweet malagas, and pure juice ports, that are current in every country town. Pure, wholesome wines never are, and never should be, sweet; a glass of syrup is no refreshment for a laborer, it is a miserable solace for the student, and as a daily beverage for anybody, actually repulsive; and as we are looking forward to the period when our wine shall be used, not only at weddings, merry-makings, balls, and dinners, but as the common drink for all classes of people, we should define now and here, that by "wines," we mean the pure, fermented juice of the grape, without the admixture of anything else whatsoever.*

That the Scuppernong is a hard, dry wine, when made without sugar, is doubtless true; but the question is, "what character will this very wine assume when mellowed by age?" The Sercial, the king of Madeiras, is a harsh, austere, and repulsive drink, for the first few years, nor is it drinkable until age has corrected the acerbity of its temper—but what then? Then it becomes one of the most exquisite fluids in the world, and commands a price superior, in some instances, to any known wine, with the exception of Imperial Tokay. The real merits of the native wine of North Carolina, then, still need development; age and proper treatment must, in time, produce something; for the Scuppernong is not destitute of delicate aroma, an important quality, indeed. The mode of culture is peculiar—the vines (layers, not cuttings), are planted one hundred feet apart, the main branches have space to run fifty feet each way, at right angles from the centre, before meeting. Each vine may be represented thus — the laterals interlacing over head and forming a canopy. The branches are never pruned, as it is said, "the vine would bleed to death." Like the vines in Lombardy, these are *high trained (haut tige)*, the lowest branches being eight feet above, and parallel with the ground. The yield is most abundant; a single vine often bearing thousands of bunches, the berries small, and but few to the bunch. Instances have been cited of single ones yielding enough grapes to make several barrels of wine, and covering two and a half acres of ground. We have no data to estimate the yearly produce of these vines, neither the quantity nor value; but we are well convinced that even now the statistics of grape culture in this State would present an imposing array of figures.

We have already seen specimens of native vines of Virginia, of excellent quality. The Catawba there is an abundant bearer, and the wine made from it essentially different from that of Ohio.—The climate of this State would seem to be peculiarly adapted for the purpose, and the wild and waste land might be turned to profitable account in the production of vines. To Virginia we are indebted for many species already popular, among which, we may instance "Norton's Seedling," the "Woodson," and "Cunningham." Here, too, the Bland grape grows abundantly, under the name of the Virginia Muscadel. In Maryland and Delaware, also, a variety of native grapes are cultivated, some of extraordinary productiveness.—

* "Be assured," says President Jefferson, in a letter to Major Adium, April 20, 1810, "that there is never one atom of any thing whatever, put into any of the good wines of France. I name that country, because I can vouch the fact from the assurance to myself, of the vigneron of all the best wine cantons of that country, which I visited myself."

One vine, raised by Mr. Willis (near Baltimore), in 1832, yielded twenty-five thousand bunches; and in the following year, Messrs. C. M. Bromwell and R. Monkland certify, "that they counted upon it, fifty-four thousand four hundred and ninety bunches, omitting small and young ones, which would have added at least, three thousand more." Why Messrs. Bromwell and Monkland could not not wait till the young ones grew up, is a question. To leave three thousand bunches out of the tally, because they were small and green, is an insult to Young America.

That part of the United States between the thirty-eighth and forty-fourth parallels of latitude, so far, is entitled to the supremacy in grape culture. Already the wines of Ohio and Missouri begin to supplant the imported Rhine and Champagne wines here, even at the same prices. Terraces rise above terraces on the hill-sides of the Ohio river, and the red bluffs begin to disappear beneath masses of vine foliage and purple clusters of fruit. In Pennsylvania, at the end of the last century, an association was formed for the purpose of cultivating the grape, for wine, and vineyards were established at Spring Mill, under the superintendence of Mr. Peter Legoux. This was a failure: foreign wines were tried and abandoned, and finally the wild grape called the Schuykill Muscadet met with temporary success. It was only *pro tempore*, however, and the failure of that vineyard threw a broad-brimmed shadow over similar enterprises thenceforward. But the vine begins to flourish again in the land of drab, and we presume by and by Pennsylvania will not be behind the rest of the middle States.

In our own State there is already much wine made from the Isabella grape—in Orange county; in Columbia county, among the Shakers; and on the banks of the Hudson, in the neighborhood of the city. We have tried many of these wines, and although want of experience, and improper treatment is manifest, yet there is sufficient merit in them, to insure us in the prediction "that the grape culture will soon prove to be one of the most valuable fields for enterprise ever presented to the people of New York." Here is the soil, here the climate for the Isabella; as Ohio is to the Catawba, so will this State be to this grape. Here, too, is the market, so that the cost of transportation will be trifling, and the day may not be far off when ships shall lay beside the rich vineyards on the Hudson's banks, to receive the golden fraughtage for distant Europe.

In New Jersey the vine has been cultivated for many years, especially in the neighborhood of Burlington. The soil of some parts of this State is peculiarly adapted for the purpose, and we may hope hereafter for better wines than those she now furnishes under a variety of foreign brands. Still further west we find that Indiana, Illinois and Michigan are improving the hint given by Ohio; in fact, Indiana must be recognized as one of the pioneers; for, in the beginning of this century, the most considerable quantity of native wine made in the United States was from the Cape

* At Mr. Weller's vineyard, about eighteen miles from Wilmington, N. C., two gentlemen (Mr. J. R. Weston and another) made an estimate of the produce of two vines. They laid out a square by measure, and picked the grapes within it, and by taking the number of square yards of the entire space occupied by the vines, they were able to tell from the quantity gathered in the square, that the two vines would yield one hundred and fifty barrels of grapes. Taking the weight of a barrel at 300 lbs. this would amount to 15,000 pounds each vine, or seven and a half tons!

or Schuylkill grape, of Vevay, Switzerland county, Indiana.

Missouri already ventures to contest the palm with Ohio. In 1852, the vineyards at Hermann embraced some forty or fifty acres only, and this year, we are informed that no less than five hundred are under cultivation there, besides many other vineyards in the interior of this thriving State. At the Crystal Palace exhibition, in New York, six prizes were awarded to vine growers of Missouri for samples of superior native wines, both Isabella and Catawba, still and sparkling. The last grape is the favorite there, as it is also in Kentucky and Tennessee. In St. Louis, the native wines are rapidly supplanting the foreign, especially the sparkling kinds: at the hotels there the majority of wines on the tables are of home production.

Now, good friend, if you are tired with our long itinerary, take this cool, green glass, and reach yonder long-necked amber-colored, Rhenish-looking flask, if you be a hock drinker; or, if not, let us cut the cords around this other cork, for the luscious fluid confined within the fair, round bottle, hath that propulsive spirit it must needs be imprisoned, and held with ligatures of flax and wire. You will try the first? Aha! you like it, do you? Compare it with this Rudesheimer, the "Berg" of 1846. Is not the aroma of the last the most agreeable? You think not? That smack of the lips speaks loudly in favor of the other; and what think you of its farewell taste—the *arrive goat*? "Fine," you say, "and delicate, and leaves the mouth sweet and cool." "Which do you prefer?" "The first," you say? Bravo for Catawba! Good friend, surprised, holds forth his empty glass, and says, "You don't say so?" We fill it, and repeat that it is true. Good friend, much animated, "Why, when I was in Cologne I paid twenty florins for a bottle of Metternich Schloss Johannesberger, and although it was an old wine, and had the arms of the prince on the seal, yet, to my taste, this wine appears even better than that." We set forth fair champagne glasses, and cut the strings of a bottle of different shape. "Try this" (good friend tastes). "By the moist, purple globules of Bacchus's great plant, this is delicious! (he drinks). What is it? We answer, "Isabella." (Good friend, watching the sparkles with the glass up to his eye)—"Not our Isabella?" We reply in the affirmative. "And where, in the name of roses and raspberries, was it vintaged?" We answer, "Cincinnati." "Not in the city?" We respond, "The wine is made and the grapes grown within the corporate limits of that celebrated western town." (Good friend, anxiously)—"Proceed with the itinerary."

To Ohio the praise belongs of first producing a pure, native wine, of great merit. Patient, careful cultivation of the fruit, with judicious management of the fermented juice afterwards, is always necessary in the production of a fine wine; and this union of scientific culture with scientific treatment had never been brought to perfection until the vine dressers of Ohio set the example.—And first and foremost among these stands Nicholas Longworth, as he is familiarly termed there, "*The father of grape culture in the West.*" It is not alone by years of patient investigation; it is not alone by the success which has followed those efforts; it was not by the vast variety of experiments he has tried, and by the untiring energy

which, in spite of numberless disappointments, still survived and triumphed over every defeat, that he has won this title from his fellow-citizens. But it was because every effort and every experiment was for the benefit of all; because, with him, the success of grape culture in this country was paramount to personal considerations; because, by every means, he spread as widely as possible the results of his investigations and labors, so that the young vine planter of to-day might stand upon even ground with himself, the veteran of nearly half a century's experience. Adlum and Dufour predicted the success of grape culture in the United States, but Longworth, their contemporary, lived to see the prediction verified, and mainly by his personal exertions. Would that all patriots were so rewarded.

The two principal wine grapes of Ohio are the Catawba and Isabella; the first, however, in the proportion of twenty to one. Both are natives of North Carolina. The first was found and noticed merely as a wild grape, in the year 1802, by Colonel Murray and others, in Buncombe county, North Carolina.* There it reposed for upwards of twenty years without attracting attention, and so would have remained probably until now, had not its merits been discovered by Major John Adlum, of Georgetown, N. C., in or about the year 1826.—Major Adlum, an officer of the Revolution, formerly surveyor-general of Pennsylvania, was a great cultivator of the grape, and devoted the last years of his life to that purpose. In the course of his experiments with native vines, he found this one in the garden of a German at Georgetown, and after a fair trial, was so convinced of its value as a wine grape, that he sent some of the slips to Mr. Longworth, with a letter, saying, "I have done my country a greater service by introducing this grape to public notice than I would have done if I had paid the national debt." Adlum paid the debt of nature soon after, but the slips fell into good hands. For nearly thirty years, with patient perseverance these grapes were nurtured by Mr. Longworth, until the hour has arrived when the prophecy of Major Adlum seems certain of fulfillment. Thirty years of patient labor; thirty years of unfaltering faith; thirty years of man's life; what a span it is! stretching from hopeful youth to hoary age; a long while, my good friend, to look forward to, a long way to look back. In the thirty years to come we may have occasion to thank these pioneers—we may see greater results than either of them dreamed of.

The Isabella grape was first introduced to notice by Mr. George Gibbs, of Brooklyn, L. I. The slips were brought from North Carolina by Mrs. Gibbs, his wife, and the vine, in compliment to her, was named the "Isabella." Originally it was called the "Laspeyre grape," Mr. Bernard Laspeyre, who resided near Wilmington, N. C., having the parent vine from whence these slips were derived. By him it was supposed to be a foreign grape, but all scientific writers on vines in this country assert that the species, in a wild state, is quite common, and is unquestionably an indigenous production of the United States. From these two grapes the best wines are made in Ohio. We may also mention that the "Herbeumont," another variety of "the natives," produces an extraordinary fine wine, the flavor being like the purest Amontillado, and essentially different from

the other two. Heretofore the demand for home consumption has prevented the shipment of these wines east of the mountains; but, by the increase of vineyards in Ohio and elsewhere, a limited quantity is now being sent to this city and to Philadelphia.*

An estimate of the entire wine crop of Ohio has not yet been made. Within a circle of twenty miles around Cincinnati there were raised in

1848,		84,000 gallons.
1849, (the worst year for rot ever known there),	35,000	"
1853,	125,000	"
1853,	340,000	"

This year,† on account of the severe cold weather in the spring, and the heavy, long, continuous rains, the crop will be a short one; but new vineyards are multiplying, and, if this year does not promise so well as the last, yet, from the increased number of cultivators, there must be a continually increasing yield of wine, as there certainly is a constantly increasing demand for it.

In comparing these wines with those of Europe, we must bear in mind that they are distinct in flavor from any or all of them. Sparkling Catawba is not Champagne, nor can Isabella be compared with any other wine known in the world. It is a peculiarity of these wines, that no spurious compound can be made to imitate them, and in purity and delicacy, there is no known wine to equal them. From the experiments made by eminent chemists, we find the per centage of alcohol ranks thus, according to Brande, and others:

Madeiras,	. . . . .	22.97
Ports,	. . . . .	22.06
Sherries,	. . . . .	19.17
Clarets,	. . . . .	17.11
Sauternes,	. . . . .	14.93
Burgundies,	. . . . .	14.57
Hock and Rhine wines,	. . . . .	13.08
Champagne,	. . . . .	12.01
Tokay,	. . . . .	9.85

Thus, it will be seen, that the most expensive wine in Europe, the "Tokay," is also the lowest in alcoholic per centage. But, we find, by the analysis of our good friend Dr. Chilton, that "Still Catawba" shows a per centage of 9.50 only, being, in fact, the lowest per centage of spirit to be found in any wine in the world.

We could pursue this subject for a page or two more, but the wine tide is at ebb in the bottle.—We did intend to speak of the late Col. Alden Spooner, formerly editor, in fact first editor, of the *Long Island Star*; a man of many virtues, and one who was zealous in introducing the grape in the Empire State. We did intend to speak of a gentleman of Ohio, Mr. Robert Buchanan, to whom we are indebted for much information on this subject. We did intend to speak of other eminent vine-growers, but there is a time to squeeze grapes, and a time to squeeze hands, and so, reader,—vale!

* The Isabella and Catawba wines of N. Longworth, were first introduced in New York in May, 1852, by the editor.

† 1854. The crop was a short one.

A GOOD YIELD.—We forwarded last fall to Miss J. E. Thomas, of Southampton Co. Va., a sample of wheat, received from the Patent Office, and have received with a fine head of the product, a note stating that of the product of one of the packages sent, 6 out of the 8 grains came up, and yielded 5330 grains, beside the head sent, which by the way, is one of the finest heads we have seen this season.

For the "American Farmer."
FARM ECONOMY.—No. 1.

There is no one virtue so little understood, and so seldom practised by Southern Farmers and Planters, as that of economy. In making use of this term, I do not mean that contracted parsimonious economy, more properly termed stinginess, which shuts up the heart and stifles every generous emotion and liberal enterprise; but that enlarged and comprehensive economy, which induces the farmer to husband all of his resources and apply them to the best advantage.

I shall not attempt to discuss this subject in all of its varied details, for that would require a volume. I propose simply to direct the attention of Southern, and more particularly Eastern Virginia farmers to the great importance of the subject, and at present throw out some hints touching the economy of the capital usually invested in land.

The great besetting sin, and almost universal fault with Southern farmers is to own and cultivate too much land. This has become a most inveterate habit, particularly with our Eastern Virginia planters. There is scarcely one of them that does not own double as much land as he really needs. This habit has grown out of the particular circumstances attending the first settlement of the country, when lands were cheap, rich, and abundant. It has been entailed by one generation upon another, and has been so long and so universally practised upon, that the most ruinous consequences have resulted from it. It is this system that at one time threatened to depopulate Eastern Virginia—that has converted her once rich and luxuriant fields into barren wastes, and that has produced the present worn-out, dilapidated appearance of a great portion of it.

With some of our old Va. fogies, this practice has become not only a confirmed habit, but a matter of pride and taste! and they would conclude that they had ceased to be old-fashioned Virginia gentlemen, if they were not surrounded by a whole territory of old field-pine and broom straw. Our Old Va. planter is a regular filibuster, (only he is willing to pay). More land—more territory—is his everlasting cry. The broad expanded acres have a greater charm for him, than the well filled corn crib, fat cattle, or the rich golden harvest. Every cent that he can hoard up by dint of the most rigid stinginess, is invested in more land, and when his cash fails him, his credit is pushed to its utmost limit for the same purpose; and when at last his wide spread acres have been reduced to utter and hopeless barrenness, and starvation begins to stare him in the face, he sells a negro or two to pay his debts, and sets out for the far distant West—there to pursue the same ruinous system, and in due course of time to produce the same results.

In order to show the immense loss that this system entails upon the agricultural interest in a financial point of view, and to exhibit the enormous amount of capital that is lying unproductive, I propose to enter more into details, and will exhibit some estimates that I have prepared upon the subject.

It may be safely estimated, that our farmers generally own double as much land as they really need, provided they were to adopt a thorough system of cultivation. But to be entirely within the bounds of reason, I will put it down to one-third—as an example, I will take one of our James River

planters, who owns say a farm of 1500 acres, worth \$30,000. According to this estimate, he has 500 acres more than he needs, or he has \$10,000 more capital invested in his business than is necessary. Now, this enormous sum of \$10,000 is not only idle and unproductive—it not only does not pay a cent of interest or income, but it is actually a tax—a dead expense upon its owner. For he has to pay in the first place, an annual tax of forty or fifty cents upon every \$100 worth, into the treasury of the State—this amounts to say \$40. In the second place it is worth \$10 per acre to fence in the 500 acres, adding to the cost of the land \$5,000—the annual interest on which amounts to \$300. And in the third place it is worth 10 per cent. to keep up the fencing, which makes another item of \$500—making the annual expense of the surplus land \$840, which added to the interest on \$10,000, the surplus capital invested, say \$600, make a yearly loss of \$1,440. But the evils of this system do not stop here. The men who own too much land are sure to cultivate too much, and the cultivation of too much land involves a corresponding waste of time and labor, which should be husbanded with as much care as capital. Furthermore, the man who has too much land in cultivation, necessarily cultivates it superficially and badly—the lands are impoverished thereby, and he falls into a uniform habit of waste—improvidence and slovenness about every thing on his farm. And in addition to all this, there is nothing that offers so great an impediment to the onward march of agricultural progress and improvement, as the habit that I have been trying to combat. The man who owns a large tract of poor land scarcely ever makes an attempt to improve it; and simply because the task is such an herculean one, that he is deterred from ever making it—Whereas, a man with a small farm has comparatively an easy task, which he commences and carries out without hesitation. But it will be said in defence of this system, that the money invested in these surplus lands is a good investment, because they may increase in value, and a good profit may at last be realized. This may be true in some few instances; but it will not do for every farmer to become a speculator in land; and besides, unless the enhancement in the value of such lands is a very decided one, the annual charges upon them will more than rebut it; for these charges and the loss of interest will double the cost in about 12 years. But, says some very provident old fogey, who wishes, like some old Patriarch,—to be surrounded by a whole host of sons and daughters, and grand-sons and grand-daughters,—"I must have land enough to settle my children on as they grow up."

As to this excuse, ten-to-one, the son when he becomes "of age," will not settle on the land that has been so kindly provided for him. And if he should be disposed to do it, it is equally doubtful whether it would be promoting his interest or not. But, says another, what shall we do with so much surplus land; we cannot find a market for them all at once. This is very true. All bad habits and customs of long standing, require much time to be corrected, and if all of our surplus lands were forced into market at the same time, purchasers could not be found for one-fourth of them. The evils of this system must be corrected by degrees. We must avail ourselves of every opportunity to reduce the size of our farms to our actual wants, and the purchaser should buy not an acre more than

worth has 500 more necessary. Not only pay a tax— has to pay it or treasury the sec- in the \$300. ent. to tem of surplus \$0,000, year- em do land avita- waste with man sarily als are uniform about o all upped- gress been large empt such ever had has nces will be in- ment, good true very be- such erges these cost elent —to high- just they

he hat he he ful ot. such em and be orld of We re- and an

he will need. Reason, common sense and experience all teach us, that the farmer should not own an acre of land that he does not need, for every dollar invested in land over and above that, is not only unproductive, but is actually a tax upon the balance. If the farmer has capital to invest, let him either invest it in making that which is necessary for him to own, more productive,—or let him invest it in loans, stocks, or something else that will pay, and not in land that is to remain idle and unproductive.

I propose in my next No. (if I should ever get time to write another,) to say something about the economy of time and labor.

"COMMON SENSE."

No more appropriate signature could have been adopted by our correspondent—the errors he points out, in the practice of the farmers and planters of his own State, (Virginia,) are equally applicable to some portions of Maryland, and other Southern States. The subject is one of radical importance, and we hope that the attention of those interested will be more thoroughly aroused to the necessity of its investigation, which we doubt not will lead eventually to a change in their long-coveted practices.

For the American Farmer.

YEAR OF PLENTY—THE CROPS OF 1857.

Under the above caption, estimates of the crops of the present year are now going the rounds of the papers, said to be based upon estimates furnished from the reports from the Patent Office for 1855, in which it is stated that the agricultural productions of the country for this year, 1857, may be attained, by adding the average yearly increase to the returns of the Patent Office for 1855—making no allowance (says the writer) for the unusual good crops of 1857, which estimates are put down as follows:

The figures in each case show the millions—both of bushels or amounts and value.

1855.	1855.	1857.	1857.
Corn, bush.	\$600,000,000	\$360,000,000	700,000,000
Wheat,	165 "	247 "	180 "
Rye,	14 "	16 "	16 "
Potatoes,	110 "	41 "	160 "
Beans & peas	9 "	19 "	10 "
Rice, lbs. of	50 "	10 "	55 "
Cotton,	1,700 "	133 "	1,500 "
Tobacco,	196 "	19 "	200 "
Sugar,	550 "	38 "	650 "
Hay,	18 "	160 "	20 "
Other productions,	243 "		
Total value,	\$1,355,000,000		\$1,600,000,000

The writer who furnished the above aggregates based his calculations, in part, upon the following data, if data they may be called, but which, I think, might with more propriety be called bad guessing:

	bushels.
Kentucky,	10,000,000
Ohio,	25,000,000
Indiana,	15,000,000
Illinois,	18,000,000
New York,	22,000,000
Pennsylvania,	20,000,000
Virginia and Maryland,	20,000,000
Other States,	50,000,000

Aggregate, 180,000,000

The writer who figured out the preceding estimates, I should judge to be either a Corn Merchant of the genus bear, or a bull in railroad stocks in Wall street, for he remarks that 30,000,000 bushels of the 68,000,000 grown in Kentucky, Ohio, and Illinois, only will be required for seed and for food for men and animals; 37,200,000, he says, will be the surplus, and will require an average transportation of 500 miles to get it to market; and should, he says, pay freight of forty cents per bushel, which freight he puts down at \$14,880,000.

So much from the popular reports now afloat in regard to the wheat crop of 1857; the most of which are now growing, and is to be consumed in 1858.

Other, and I think, much more reliable data are at hand, from which I will venture an approximate estimate, as well to the amount as to the value thereof for the crop of 1857:—

Popula- tion.	Hay, tons of	Value.	Cotton, lbs. of	Value.
			Corn, bushels	
1840 17,067,453	10,348,108	\$60,791,792	790,479,275	\$57,163,410
1850 23,191,876	12,888,888	128,392,439	978,817,200	78,265,376
1865 27,185,517	15,943,630	1088,409,000		
1877 30,000,000	18,442,540	276,637,224	1310,500,816	156,320,000

	Wheat, bushels of	Value.	Corn, bushels,	Value.
1840 17,067,453	84,823,379	\$68,034,934	377,531,375	\$132,000,000
1850 23,191,876	100,480,544	90,437,380	812,071,104	296,075,553
1865 27,185,517	109,665,618		717,912,546	
1877 30,000,000	113,698,378		770,000,000	691,929,209

It will be seen by the above estimate that the four great staple crops now reaches an aggregate value of \$1,320,426,728, and stand in the connection as regards values, thus:—Indian Corn, \$691,982,609; Hay, \$276,637,204; Wheat, \$194,737,304; Cotton, \$156,720,000. Aggregate, \$1,320,072,726.

In another part of this paper I have given the estimate emanating in advance from the Patent Office, and from other extra staticians, showing in their estimate, the wheat crop of 1855 to be of the amount of 165,000,000 bushels.

If the value of the sixteen other items under the head of agricultural productions—which are not here specified—have kept pace with the four products just named—amongst which is live stock, which in 1850 was of the value of \$136,045,129—then the value of the farm products of this country for 1857 may be put down at two thousand one hundred and ninety-two millions, nine hundred and twenty-eight thousand dollars, (\$2,192,928,000.)

I calculated the prices of the first four great staples, corn, hay, wheat and cotton, at or indeed below the average prices such articles brought on the 1st of June last—the day of the year in which the census reports are made up. But it was of the amount and value of the wheat crop alone that I sat down to note; the accounts of which, in my opinion, have heretofore been by writers greatly overrated.

THE NATIONAL STATISTICS show that the increase or gain in the wheat crop during the ten years between 1840 and 1850, was only 15,645,378, or at the rate of nineteen (19) per cent., whilst the population of the country in the same decade increased from 17,067,453 in 1840, to 23,191,876 in 1850, showing an increase of thirty-six per cent. During that decade, the crop of wheat fell off in the six new England States from 2,014,000 to 1,090,000 bushels—a decline of 924,000 bushels, or nearly one-half of their crop. Kentucky fell off from 4,813,828 in 1840, to 2,140,822 in 1850—a decline of 2,673,006, or more than one-half.—

And this is one of the States that the speculator in corn and railroad stocks puts down as good for 10,000,000 of bushels. Ohio, the same statistician puts down at 25,000,000 of bushels, fell off from 16,571,000 in 1840, to 14,487,351 in 1850—showing a loss of 2,094,000 bushels. Tennessee produced in 1840, 4,569,692 bushels, but fell off in 1850 to 1,619,384—losing in ten years 2,950,308, or nearly two-thirds of her former crop.

Several other of the cotton, tobacco and hemp growing States fell off in a greater ratio than any of the above cited; nor have we any evidence that any State has more than kept pace with the gradual increase of their population. Indeed we have abundant evidence to the contrary in the fact as above stated in the falling off in the productions in many of the States within the last decade.

In another part of this paper I have given the estimates emanating in advance from the Patent Office, and from other *extra* staticians, showing the wheat crop of 1855 at 165,000,000 bushels, and that of 1857 at 180,000,000 bushels.

I will now give the official, as shown from the reports of the finances of 1856, as taken from the census reports, together with the amount exported, and the amount left for consumption. Thus—

	Population.	Wheat Crop.	Bush. Wh't Exported.	Consumption.	
1840	17,087,463	84,823,279	11,203,365	73,615,014	4%
1850	23,191,276	100,126,944	7,535,901	92,599,943	6%
1855	27,186,519	109,665,678	6,201,594	103,464,994	3%
1857	30,000,000	113,590,278			5%

The above noted three periods are the only official data that are to be found in the government statistics whereby it is safe to attempt an estimate. By these, it is seen, that in 1840 our exports were 11,203,365, leaving for home use 73,615,014 bushels out of a crop of 84,823,279, leaving about 43 bushels of wheat for each inhabitant; in 1850, the exports were 7,535,901, leaving four bushels to each inhabitant. For 1855 the financial report is, in part, official or semi-official, much of the statistics being taken from those States which have their census taken in 1855—a good custom which should be adopted by all the States of our rapidly growing republic. The coming, or next legislature of Delaware I hope will see to it, that a law be passed to adopt that course in the future. Delaware will not lose caste by the more frequent enumeration of her agricultural and manufacturing industrial employments. Indeed, I was much and agreeably surprised recently, when preparing a paper on the Agricultural Resources and Productions of Delaware for Dr Bow's Industrial Review, to find the difference in the amount and value of the farm products of Delaware in the three periods, as here set forth:—In 1840, agricultural product, \$3,016,324; in 1850, \$3,074,946; in 1857, \$13,074,946, or over three times as much in value as in the ten preceding years. It may be remarked in passing, that this increase was not so much from the increase in amount of production raised, as from the increase in price of the article produced.

Had the census, or a census been taken at the intervening period of 1845 and 1855, the aggregate business, and consequent wealth of the country, would have shown a very different and more satisfactory result. It will be recollect that in 1840, when the census was taken, the business of the country was prostrated, from the transition of a protective tariff, by the reduction of duties, although low, by the Compromise of 1832, which

had the effect of reducing the value of every kind of industrial employment, as well the agricultural as the manufacturing and commercial, and particularly reduced the price of breadstuffs, the subject now under discussion—as it will be seen that the 377,531,375 bushels of corn produced a value of \$132,000,000, or about 40 cents per bushel, and the 84,823,579 bushels of wheat of that year being of the value of \$68,033,536, or about 80 cents per bushel. In 1850, the business of the country had again been paralyzed by the Free Trade tariff, and again the values of all productions declined—that the 100,485,844 bushels of wheat of that year, brought only \$90,537,260, and the 592,071,104 bushels of corn to the value of only \$296,035,552, or only about 50 cents per bushel at the port of exports. Since then, in consequence of the war in Mexico, and the accidental discovery of gold in our country, the labour of the fields has been diverted to mining and other pursuits. The building of some 12,000,000 miles of railroad, at a cost of \$500,000,000, (perhaps I have not the particular accounts at hand), together with the tendency of our people to leave the country for the city employments, has decreased the number of farm labourers, and, as a consequence, raised the price of breadstuffs, until it now rules at double the amount it did in 1850. The wheat crop in June, 1855, ranging at the shipping ports (the ports where the value of cotton is taken) of New York, at an average of over \$2.50 per bushel—and at that price Secretary Guthrie should have put down the price of wheat in 1855, and not left it in blank. The value then of the wheat of that year would have been \$274,164,594. Wheat on the first of last June was of an average value of \$1.80 in New York, and ought to have been so put down, which would have shown a value of \$204,471,100; but to save appearance of over-estimate, I put the price of 1857 at \$1.75 per bushel, which price I predict will fall far below the average range of prices the coming twelve months, in which the crop of 1857 is to be consumed.

It may be remarked here, and I call upon all persons interested, to note the fact for future reference, that the prices of all agricultural productions, particularly wheat and corn, at given periods, are the best indexes to judge of the supply, and that supply, in general cases, is governed by the demand—exceptions may occur in some few cases. The prices are far better to judge from, than the appearance of the growing crops. The States which in the last decade showed the greatest improvement in the production of wheat, and the only States which had increased on the population, were Delaware, New Jersey, Maryland, and Virginia to a small extent, (I mention them in the order of the greatest improvement,) have fallen off in their crops this year, but that will affect the general crop of the Union but little. Our wheat-growing region is so extensive, that many States may be scourged by insects or blights of some sort, but yet those that fall short in one year, may produce better the next, and yet a medium crop may always be expected throughout the country. Owing to the American system of internal improvement, railroads, &c., the prices throughout are nearly equalized, as can be ascertained by the curious in such matters, by looking over the prices which ruled on the first of June last; the prices on that day ruled nearly the same in Boston, New Orleans, Charleston, New York, Philadelphia, St. Louis and Louisville.

It is a matter of astonishment and regret, that there should be such discrepancies in the Reports of the products of Agriculture, between the Financial Report of the Treasury, and that of the Patent Office. The former puts down the crop of 1855 at 109,000,000 bushels, and the latter at 165,000,000. The same manner of calculation by the Treasury, would fall below my estimate—that of 113,000,000—whilst that of the Patent Office reaches 180,000,000 bushels.

It would be better by far that no calculation should be made of the growing crops, both for the farmers and the consumers, than that they should be so far overrated. By overrating, farmers rush in their crops; the speculators put down the price, and sometimes some millions of bushels are sent away, and all so sent away are just so much gone from consumption. The speculators beat down the prices until they can command the market; then they put up the price, and the American consumers have to pay the extra. The speculators only are benefitted, the farmers having long since sold out to the sharers, who, in turn, have become as a bull in Wall street, and *horn up the price*.

Greatly to the loss of the farmer, the prospects of a foreign market is held in too high estimation. There is but little, if any, wheat now produced more than is consumed at home. Indeed, astounding as it may appear, we, the people of the United States are now importers of wheat direct, (exclusive of starch.) The lamented C. P. Holcomb, in his last paper over the signature of the "*Middle State Farmer*," had ascertained that the amount received from Canada in 1855 had reached 12,000,000 bushels. The Philadelphia Ledger mentioned in an exulting manner, that Canada was good for an import of sixteen million of bushels of wheat. That year, I regret to say, that we were entirely in the dark as to the quantity of wheat imported from the Canadas. A reprehensible silence has been observed on the part of the government, such as would justify the people in the belief that even the dignitaries at Washington are ashamed of that treaty called *Reciprocity*, which sends in Canada wheat to compete with ours, and induces our negroes to run where they are protected by the queen's laws, so that no fugitive law can touch them. Thanks are due to the Senators of Delaware, the lamented J. M. Clayton and J. A. Bayard, both of whom opposed that measure, which let all Canada products come into the United States—whilst England charges and collects \$22,000,000 on tobacco, some 1,000 per cent. on the article.

The only reliable statistics that I have been able to gather as regards Canadian wheat, I found in a report of the import of Canadian wheat through Oswego, in which it was stated that over 10,000,000 bushels had been received in 1855. The exports of wheat from this country to all the world reached only 6,821,584 bushels in that year, which showed that we imported 3,500,000 bushels more than we exported, and that too from the single port of Oswego.

It is probable that our imports from Canada, from all ports, may reach a ratio of advance upon Holcomb's, or even upon the calculation of the Philadelphia Ledger—say now in 1857 of 30,000,000 of bushels, which added to the 113,598,287 put down in another column, would make the whole amount left for consumption, say of 143,596,782; and even this amount would leave for consumption, seed and feed for men and animals,

less than five bushels per individual—the general estimate for individual consumption. All this strengthens the correctness of my estimate as to the quantity of breadstuffs raised, and the value of the products of the farm.

Will Governors King of New York, Pollock of Pennsylvania, and the Governors of Ohio, Illinois, Michigan and Wisconsin, not see to this culpable negligence on the part of the general government in regard to the importation of wheat through Canada, and give the desired information in their next annual message. It is right that the American farmers should know who are their rivals of pure wheat in their own markets, and the amount and value thereof.

The sheer negligence manifested on the part of the government officials, both in the Treasury and Patent Office departments, as shown by the discrepancy in calculating, which undertakes to superintend this great and important occupation of this country—the product of which, as the produce of the farm alone, is put down at the enormous value of \$2,192,000,000, (exclusive of the value of our lands, slaves, &c.,) shows most conclusively the importance of an Agricultural Department, with a Secretary who will not only have the *ear* of the President of the United States, but cause his *heart to incline* to that employment that all admit to be the great source of wealth, power and hope of the republic—Agriculture and Agriculturists.

J. JONES, W. D.

PLOUGHED IN WHEAT.

To the Editors of the *American Farmer*:

GENTLEMEN:—I have read several communications published in your valuable paper, the *American Farmer*, which without controversy stands as high as any agricultural monthly issued through the land—I heartily, and most cordially recommend it to all my brother farmers, for its clear conception of thought, for its practicability, adapting itself to the wants of every one who may be in search of information; its plain and unsophisticated solutions which it arrives at, giving entire and general satisfaction.

The following experiment on Ploughed in Wheat I submit or offer to the public, without remark and comment. The soil on which I experimented on was a stiff low bottom, tenacious; moderately good, nearly exhausted of its organic fertility. The wheat was the white Pennsylvania blue stem; early in September, I directed my man to sow four pecks to the acre; it was rather tall sowing, for the greater part of the wheat lodged in the grass and weeds; the weeds were from two to three feet high, the grass and wheat stubble from six to twelve inches; from the same field I reaped a lot of wheat in July last. With a single horse and plough I put in two acres and a half in this manner. The wheat was from ten to twelve days before it made its appearance; it had a sickly cast, with here and there a grain up, and the cold winter which commenced early apparently used it all up—In May and June, what few seed remained on the land to my utter astonishment, commenced to branch and tiller off, and throw up vigorous stems, and in July early, before I commenced to reap, I had the curiosity to give it a general examination—I counted sixty good healthy heads from one grain, the heads measuring from four to five inches and a half in length. This entire lot of wheat which was thus put in on the green sward, in rather a careless way, proved to be the heaviest, largest and soundest, and I am satisfied that it produced more to the acre according to the quantity of seed sowed, than the entire field of thirty acres. A. V. FOREMAN.

AMERICAN FARMER.

Baltimore, September 1, 1857.

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Address,

S. SANDS & WORTHINGTON,

Publishers of the "American Farmer,"
At the State Agricultural Society's Rooms, 128 Baltimore-st.
Over the "American Office," 5th door from North-st.

Several communications in this number of the "Farmer" will attract attention—among them, is that of "Well Wisher," on Grape Culture—and as we are particularly in need of a "party" just now, we don't know but that we are nearly prepared to join the new one he has designated. Major Jones of Delaware, has furnished a very excellent paper on the wheat crop, which will be found of much interest at this time—but what's the "W. D." for, Major?

ADVANCE IN PRICE OF PERUVIAN GUANO.

About the 10th of the last month, the Peruvian Agency advanced the price of their guano \$5 in the ton; it now sells by retail at 65 a \$67 per ton of 2240 lbs.—and things are so managed that but little competition can be had with dealers, and they can put it up to any point they may deem it likely the article will bear. We find no fault with the dealers—they, like all merchants, we suppose, will feel justified in getting whatever an article they have to sell will bring—but the system appears to us to be iniquitous, which enables a few individuals thus to have the power of combining and controlling the price of an article, which is deemed by many almost as essential as bread itself,—for without it their lands are hardly worth the cultivation,—and to amass large profits at the expense of the agriculturists of the country. We would continue to advise our friends to use as little of it as possible—we believe a mixture of it with the phosphatic guanos, will pay better than the application of it alone, on most soils, and at a much cheaper rate. Many farmers are ordering the drills with guano attachment, in accordance with the suggestions of M. T. Goldsborough, Esq., and Dr. J. R. Wood, in the two last numbers of the Farmer—others have used the Colombian with much success, and many others De Burg's and other Super-Phosphates, &c.

The cause of the advance, is said to be its scarcity, and the expected delays of the supplies intended for the fall trade—but there is a plenty of it in the country, probably, if placed at proper points.

Our dealers are now receiving supplies from Philadelphia and New York, where it is stored, instead of its being sent to this port, which is the legitimate market for it.

THE CROPS.

This fruitful subject continues to attract attention throughout the country—and very opposite results have been arrived at. We have received during the past month, assurances from various quarters, of the general correctness of our advices and our conclusions in regard to the wheat crop; some of our correspondents say, that so far as the crop of this country is concerned, they have no doubts upon the subject; but that the expected large crops in Europe will probably affect our markets.—We give elsewhere in this number, some views upon this point—and late important news from Europe will be found in our notice of the "markets." For our own part, we have no doubt that whilst in some portions of Europe, as in this country, the harvest has been very favorable, in other, and most important districts, the reverse has been the case. In addition to the statements elsewhere, in regard to the crops in the wheat districts of Russia, we have accounts from Sweden and Norway representing the prospects as very unequal, and on the whole, indifferent. It is believed that Sweden will have to import largely during the next year, the more so that there will be barely half a crop in the neighboring territory of Finland. In Europe also, as in this country, there is but little of the old crop on hand.

There is a prospect of a fair tobacco crop, but so far as this State and Va. are concerned, it will not be an extra one; it has suffered much from the wet season. Complaints are heard from many directions, of the appearance of the potato rot, both in this country and Ireland, but as far as yet developed, we have no reason to anticipate its ravages being general. The hay crop has been large, a great deal of it, however, has been damaged by the continued rains during the harvesting. The corn crop in most sections bids fair to be very large, but the short stock of old on hand will require a very unusual amount of the new crop for immediate use, as fast as it can be secured.

Nearly all the wheat which has reached our market since the harvest, has been in a damp state, which has caused very serious deductions from the price. Mr. Johnson of N. C., whose crop we noticed last month, has since then sent another lot to market, part of which in good order brought 190 cents, whilst the remainder, in a damp state, was sold at 170 cents.

The Washington Co. (Md.) Agricultural Exhibition takes place on the 13th to 16th Oct. at Hagerstown. Ex-Gov. E. Louis Lowe is to deliver the address.

The Montgomery Co. (Md.) Society's Show will be held at Rockville, on the 10th and 11th Sept. inst. Judge Weisel, of Washington Co. has consented to deliver the annual address.

**THE ECONOMY OF HIGH CULTURE—IMPROVING
LIGHT LANDS.**

Looking recently over the well-managed farm of our friend Mr. Hewlett, we were furnished with several hints, which our readers may profit by.

Weeds of every sort have grown apace during this extraordinary season. The "Rag weed," which after harvest takes possession of all our stubble fields, will this year more than ever consume the substance of the soil in the growth of a luxuriant and a useless if not pernicious crop. The effect of Mr. Hewlett's high culture and abundant seed-sowing is, that the ground is thoroughly "set" with the young grass, to the entire exclusion of weeds. On the 1st day of August, less than three weeks after the close of harvest, the wheat stubble is entirely overtopped by the growing grass, and it is almost safe to say, that not a plant of any sort is to be seen upon the field, but just what was intended to be there. The whole resources of the soil go at once to the production of another valuable crop. This after-growth will cut by the first of October half a ton at least, to the acre, of excellent food for milch cows and calves. Such an item is worthy to be noted when we are estimating the economy of high culture.

There is connected with this, another result of Mr. H.'s system of dispensing with cross-fences and excluding stock from his arable lands, which we should not overlook. The development of the roots of plants keeps pace with that of the stems and leaves. If these are eaten off, mutilated, or destroyed by cattle, the growth of the roots is checked and interfered with. If the plants get their full growth, the roots descend and expand proportionally. The crop is therefore much better preserved against the effects of frost; and the more complete the development of the young roots this season the heavier the crop of hay the following year.

We may profit by another hint from this field. Our "light lands" are esteemed too lowly, especially as regards their capacity for growing grass and wheat. It is a very common opinion, that they cannot by improvement be adapted to the profitable growth of these crops, and that owing to their loose texture they will not "hold" manure and cannot be permanently improved, unless perhaps they have an understratum of clay near the surface; we have seen the error of this opinion illustrated elsewhere, but never so forcibly as here. One third of the field was a few years ago a blowing sand, with no clay within fifteen feet of the surface. The very best clay lands or such as are known as grass lands, can hardly make a better show of grass now. In the past years after yielding (by measurement) 42 bushels of wheat to the acre, it gave heavy crops of timothy, orchard grass and clover in three successive years, followed by 14 barrels of corn per acre. The crop of

wheat this season was not exempted from the ravages of fly so general in the State. It was so much fallen that a large portion of it could only be cut with the grass scythe. Mr. H. thinks, nevertheless, that 20 bushels per acre is a moderate estimate of the crop.

The success of the famous English farmer Mr. Coke, of Norfolk, in adapting the lands of his immense estate to the growth of wheat should be borne in mind in our estimate of such lands. "The soil on which these improvements have been made," says Mr. Colman, "was a thin, gravelly, and light soil," and thought incapable of growing wheat. "The average yield now" he continues, "on the whole estate, is from forty to forty-eight bushels per acre; and the whole crop of a large farm in 1844-45,—a most favorable season,—averaged fifty-six bushels per acre."

Our light lands are more thoroughly worked, and give their strength more freely in the growth of crops. If they are, therefore, more easily exhausted under bad management, the result is the effect of injudicious treatment and not the fault of the land. A generous mind does not quarrel with a friend because his funds are exhausted, when the exhaustion is caused by a free response to his own constant demands. A generous friend is treated generously; and these soils only require that as they "freely give" they should freely receive.—They fall off easily under bad treatment, but respond liberally when liberality is shown them.

We found Mr. Hewlett's corn, his crop of peas for turning under, and the aftergrowth of hay all in great luxuriance. The abundant rains of the season have kept the country in its deepest green; and nothing could be richer than the appearance both of woods and fields.

The vegetable garden of several acres in charge of Mr. Sheffield, is a wonder to behold. How he keeps such extraordinary crops, in such a season as the present, so very free from weeds and grass is something of a mystery. A quarter of an acre of sugar beet promises, we think, at the rate of a thousand bushels to the acre without fail.

P. S.—Since writing the above we are obliged to Mr. S. for the opportunity of testing the quality of his Egg-plant and Tomatoes, and find them very superior. One of the former weighing about four pounds, and of the latter some 20 ounces.

HINTS ON WHEAT CULTURE.

The wheat crop is of so much consequence to the whole community, and especially to the large body of our readers, that we are not likely to make it too frequently the subject of remark.

It is a reproach to our agriculture that while the very frequent experience of some of our best farmers gives crops of thirty and forty bushels per acre, the usual product of our lands, without a large direct outlay for fertilizers, are hardly more

than a fourth of these quantities. The ready excuse is the difference in the quality of the land. As a general thing this is only an excuse. The very lands now so productive, have been, within the memory of many now living, as poor as the poorest; and of those now so poor, who will undertake to say that their natural constitution makes them incapable of the highest degree of improvement? There are, no doubt, cases of this sort, but they are exceptional; generally there is nothing wanting but the proper use of the right means. When a land-holder finds that on all his possessions, he has not so much as a garden or a favourite lot which pays the cost of the manure put upon it, and that weeds do not grow near his kitchen door or his pig-pen, he may give up his land in despair. Otherwise let him not excuse his indolence and want of spirit, by charging the fault upon his land, without giving it at least a very fair trial. Nor is it flattering to our vanity, that even our best farmers, on the best lands, come so far short, generally, of what these grounds are capable of producing. Well attested cases of fifty bushels to the acre, we have had on a small scale, and frequent cases of forty to the acre, on considerable fields. They show sufficiently what can be done. But such crops are so very rare, that it is plain enough the most successful cultivators cannot command them. In England, on large estates, an average of forty to forty-eight bushels is not unusual, according to Mr. Colman, and he mentions one well proved case of ninety bushels to the acre. But there as well as here, how very far below the lowest of these numbers, are the average crops of many of the best farmers. The truth is, that the great body of cultivators do not work up to the knowledge at their command; and the most intelligent do not understand the subject of wheat growing, as so important matter should be understood. We plead the numerous enemies with which the wheat crop is plagued, as the cause of so much uncertainty and failure, and with some reason. Sometimes, as during the present season, no known remedy has been of any avail against their ravages in certain localities.—But taking the average of the ten years past, we think it will be admitted that the growing of wheat has not been unprofitable, and that the certainty as well as the quantity of the crop has been in almost exact proportion to the skill of the cultivator in the improvement of his lands, and the proper manuring and cultivation of his crop.

It is mere folly to undertake to cultivate wheat upon poor land insufficiently manured. Land not capable of yielding fifteen bushels to the acre, should be manured, or let alone for some improving crop.

Wheat requires clean culture; it cannot be grown to advantage on any grass sod, except a

well managed clover-fallow. A well turned clover sod, that has been mowed or judiciously grazed, is the best preparation for a crop. The pea-fallow is thought by many equal, by some superior, to the clover. Its value for the wheat crop will depend, in a measure, upon the care with which it is managed; so large a mass of vegetable matter put in with a shallow ploughing, may keep the surface soil so porous as to do the wheat a serious harm.* If not very thoroughly turned under with a deep furrow, it is better perhaps to do as is done by some experienced cultivators in Virginia, and so put in the wheat and the vines, as to leave a large portion of the latter uncovered on the surface. In either case, the land should be heavily rolled. A firm seed bed seems essential to the well-being of wheat. Deep ploughing is not to be objected to, but it is important that the earth be well compacted with the roller, when the seed is sown.

Any grass sod, other than clover in its second year, should be planted in some cleansing crop, which will give the sod time to be thoroughly rotted. The best of our cultivated crops for this purpose is, without question, tobacco. The neat, careful cultivation, the thorough shading, and destruction of all grass and weeds, leave the ground in a state of perfect preparation for the wheat. The shallowest working of the surface which is sufficient to cover the seed, is all the labour required for putting in the crop; or a drill alone will do it, without any other preparation.

The most common cleansing crop is corn, but it is by far inferior to tobacco. If rich enough for wheat, the crab grass grows so luxuriantly after the working ceases, that it is hard to put the wheat in properly. If not rich enough to produce grass, it is not fit for wheat. A great deal of the wheat crop, however, is sown upon the corn-field, and it is upon these fields that the purchased fertilizers are chiefly used. Wheat growers of very reliable judgment, have adopted the practice of putting in the seed upon corn land with the drill, with no previous preparation by ploughing.—Others stir the surface with harrows, only enough to procure a covering for the grain. They avoid turning under the grass, and leave a firm bed for the crop to grow upon.

The practice of drilling in wheat with a machine, is one of the most important advances which has been made in wheat culture. The saving of seed, the increase of the crop, the security against winter-killing, and great economy in the application of fertilizers, are advantages so

* The case mentioned in our last by our correspondent, Mr. Rouzee, may be accounted for, in this way: the mere growing of the pea vine, by shading and cleansing the ground, is an excellent preparation for wheat. Therefore there was a good crop where the vine was entirely removed. It was inferior where the vine was left, because perhaps the bed was left too open, and exposed to the action of the weather.

important and so well ascertained, that no one who sows twenty-five acres, should fail to use the drill.

The introduction of the drill-culture will be followed, we do not doubt, by the practice of spring cultivation, with an implement to stir the intervals between the rows of wheat. The use of the roller is of great importance in the spring, to close the seams left open by the action of the frost, and settle the plants well in their bed. But the stirring of the intermediate spaces to the depth of a few inches, in such a manner as not to disturb the plants, would admit the influence of the rains and atmosphere, with undoubted advantage to the crop.

As to the time of seeding, the rule is, certainly, to sow early. There is great advantage in having the seeds soon enough in the ground, to get the plants well rooted by winter. It may be well borne in mind, however, that while the enemies of this crop generally, seem to have taken counsel together for its destruction, the fly especially has, for several seasons, been accumulating upon us, and may be of course expected again in force. It is desirable, for this reason, to postpone the seeding till after about the 5th of October. Earlier seeding is less essential, with advantages we now have, than it was some years ago; because, 1st, the drill is almost an insurance against winter-killing; and 2d, the use of guano is almost an insurance against rust. We would take chances against rust and frost, with a drill and only fifty pounds of guano, sowing by the middle of October, rather than to sow twenty days earlier without them. As to fly, the later seems to be, without question, the safer time. The impression that the later sown wheat is as subject to the attack of fly in the spring as that sown early, has not been sustained by our observation of the past crop. The field which had most fly in the fall, has been that which suffered most from its ravages in the spring. This, we say, is our observation; we should be glad to learn how far it coincides with that of others.

We would not, therefore, in this latitude, sow before the 5th of October, but would have every thing in readiness, to get through at the earliest possible time after this. The fallow should be in readiness weeks before, that it may become well settled by seeding time. The corn should be cut off and set up, and every preparation should be made in advance, which may expedite the work of seeding, when once begun.

In conclusion, the wheat growers of Maryland and Virginia, have had this season an unusual opportunity of becoming acquainted with the character and habits of the several enemies which beset this crop. In some districts they have been very destructive, while in others they seem only to have given notice of their intention to come again. It is to be supposed, that there has been picked up by intelligent observers, many hints

which might throw such light upon their ways, as would enable us, in a measure, to prevent or circumvent them. Why will not our friends furnish us with any information they may have gathered?

MILLS FOR GRINDING SUGAR CANE.

We have sundry enquiries, preparatory to the ripening of the sugar cane so extensively sown this season, for a suitable Mill. We hope those who have heretofore promised to have such mills erected in time, will at an early day as possible, announce the result, and if ready, the price and where to be had. We find in the Raleigh, N. C. Arator for July, that Mr. Albert Johnston, of that city, a skilful machinist, has constructed a neat little hand mill, with wooden rollers five or six inches in diameter, with which to extract the juice from the sugar cane. The Editor of the Arator saw it operate a few days ago. A man can turn it with ease; and with a hand to feed, it will extract sixty gallons a day. One with iron rollers, upon this model, might be made so cheap as to suit all who design nothing more than to make their own molasses. Mr. Johnson simply intended his for an experiment, and the editor has seen a specimen of some very rich syrup which he made with the aid of it, from a gallon of juice. Three gills, boiled down thick as honey, was the product of the gallon, taken from ten unripe stalks.

Since the above was penned, we find in the Philadelphia North American, a notice of a visit to the farm of Nathan B. Willis, of Haddonfield, N. J., near Camden, who has 8 acres of the sugar-cane growing, which is expected to mature about the 15th Sept.—by estimate there are about 30,000 stalks to the acre, but it is thought it would have been better were there only 20,000, as it is too close. Mr. Willis, has erected a Mill made by Hedges, Free & Co., of Philadelphia, (heretofore noticed in the Farmer,) which is propelled by 2 horses; the mill and other fixtures will cost about \$300—besides sheds and brick-work, and he expects to make 200 gallons syrup per day. We are in hopes these, or some other manufacturers will have prepared Mills on a cheaper scale, for the numerous parties who have entered into the cultivation of the sugar-cane this season—very few of whom will require a mill of the capacity and cost of that mentioned above.

P. S.—In reply to a note to Hedges, Free & Co., the editors of the Farmer are informed that they will not have a small mill this season, as was expected.

The Valley Ag. Society has its Show at Winchester, Va. on 13th to 16th Oct.

The York (Pa.) Show takes place on 7th to 10th October.

The Wythe Co. (Va.) Exhibition will be held at Wytheville on 13th October.

**THE ROOTS OF PLANTS—THEIR ACTION UPON
THE SOIL.**

"Wiegman and Polstorf collected a quantity of pure white quartz sand, digested it in a mixture of nitric and muriatic acids, and then washed it well with distilled water. In this sand which contained 98 per cent of silica, they sowed seeds of various kinds, oats, barley, tobacco, trefoil &c; and as they grew, watered them with distilled water. The plants when burned, gave an ash, which invariably contained more potash, soda, lime, and silica, than was present in the original seeds. The young plants, therefore by means of their roots had extracted from the insoluble part of the sand, which the acid refused to touch—the several substances which were necessary for their growth."—*Lectures on Ag. Chem.*

In occasional articles on the subject of green manuring, and the improvement of the old fields of the Atlantic States, we have argued the improbability of such lands having been exhausted of the mineral elements of the soil, essential to the growth of our cultivated plants, and the sufficiency of fertilizing plants alone, for restoring their original fertility. The foregoing passage from Johnston's lectures on Agricultural Chemistry, touches both of these points with much force, and bears very high testimony to the correctness of these opinions.

First, it was proved by the most careful experiments of the chemists named, that these mineral compounds and combinations are so stubborn, that the very severe test of digestion in muricic and nitric acid failed to dissolve and separate *potash, soda* and *lime*, all of which were proved uncontestedly by the analysis of the ash of plants afterwards grown, to have been present in the soil. What stronger evidence is required of the indestructibility of these elements? and how improbable it is, when we find them thus locked up, that they are wasted, washed out, or otherwise disposed of, except as they are used up *pari passu*, with the organic or decayed vegetable matter. When we bear in mind then how large is the proportion of inorganic to organic matter in twelve inches depth of new soil, and how small the consumption of inorganic as compared with organic matter, by growing plants, we get a more just idea of the condition of our "worn out" soils, than are commonly entertained.

But, let it be observed, that "the young plants, by means of their roots, extract from the insoluble part of the sand, which the acid refused to touch—the several substances which were necessary for their growth." These little roots, by an alchemy which the chemistry of the day knows nothing of, unlock the hid treasures of the earth and bring them out. The marvellous *life power*, the *spirit* of the tender plant, guided by a light which the philosophers see not, and armed with a power which they cannot rival, discovers and brings to the light, what the best wisdom and science had left concealed.—The gentle nursing-mother opens her bosom and gives to the tender nursing what no force of man's devising could wring from her.

Let us take the hint, and do by indirection, what we may fail to do directly. Let us put her pet sucklings to her breasts to draw out the earth's reluctant treasures; as the dairy-maid must often bring in the calf to induce the cow to "let down" her milk.—Dropping the figure, let us use the plants that grow most freely on an unfruitful soil, and through them and by their means, bring out the resources and the capacity of the soil for the growth of better plants and for our own use.

ANNUAL EXHIBITION OF THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

We are indebted to *Geo. W. Andrews, Esq.*, of this city, now on a visit to the land of his ancestors, for a copy of the *Salisbury and Winchester (Eng.) Journal* of 22d July, which is filled with a description of the Show, and proceedings of the above Society, held at Salisbury the preceding week. The entry of stock was one-third and of implements nearly a fifth greater than at any previous exhibition, and the whole show was pronounced "a decided success." Mr. Andrews, in forwarding us the copy of the proceedings, hopes that we and the officers of our State Society, will be aroused by the zeal and energy displayed, as evinced in these proceedings, to greater efforts in behalf of our State Exhibition. Much of the interest of the Show was manifested in the trial of Mowers and Reapers, and Steam Ploughs, the latter admitted to be a decided *failure*, so far as the trials on this occasion are a test. In regard to the former, we are told that "the American machines required many alterations before they were fitted for cutting the English heavy crops in the neat manner required" by the English farmer.

Eventually the three which it appears public opinion had settled down upon, were M'Cormick's, Hussey's and Bell's, which fell into the hands of parties "who have now (says the *Journal*) been competing with each other with varying success for the last five years, viz., Crosskill, who has improved Bell; Burgess and Key, who have improved McCormick; and Dray, who has improved Hussey. At Chelmsford last year, after an imperfect trial upon rye, it was decided to adjourn the award of prizes to a later date, and accordingly when the harvest was ripe, a great competition was carried on for four days, at the farm of Mr. Fisher Hobbs, of Boxted Lodge, Essex, where fields of wheat, from thirty to forty acres in extent, with crops of from five to six quarters to the acre, gave ample scope for the use of machinery. On that occasion half the sum offered was given to Crosskill, and the other half divided between Burgess and Key and Dray: the judges at the same time reporting that Dray's was the best machine for reaping, as distinguished from mowing. At the trial on Saturday at Bishopsgreen, this decision has been reversed. The first prize has been given to Burgess and Key, the second to Crosskill, and Dray's is passed over without any mention. The short and imperfect trial on the miserable crop of rye on Bishopsgreen, will certainly not be generally considered worth much compared with the elaborate trial at Boxted

Lodge; but it is rumoured that it will lead to one very satisfactory conclusion—in the judges recommending that no further prizes be awarded until some decided improvement is produced."

The reporter for the Journal, after pointing out the advantages and deficiencies of the several machines, comes to the following conclusion:—

"For the reasons stated we should recommend the great farmers to whom despatch is of importance to buy two machines. The two we should advise would be a Crosskill and a Dray, but it is right to add that many excellent farmers use, and are well satisfied, with the Burgess and Key."

There was a machine on the ground called the "American Eagle," which is minutely described, which is said to have "won large prizes, amongst others one of 200*l.* from the Massachusetts Agricultural Society, when competing with four machines on the plan of Ketchum, McCormick, Hussey, Manny, and Allen."

As this seems like news to us—can any of our contemporaries throw any light on the matter. Has some Yankee been trying to humbug the natives of England, with high sounding claims for his machine?

The Journal gives a description of every implement and machine on the ground, which occupies nine of its ponderous columns—also a list of the premiums awarded, as also for the cattle, sheep, horses, hogs, and poultry, the latter seeming to make a very considerable portion of the Show—and a very interesting account of the dinner and the speeches delivered thereat, in which many of the most eminent agriculturists of Europe were partakers.

DEMAND AND PRICES FOR BREADSTUFFS.

Under this caption, the Chicago (Ill.) Press, after assuming it as a fact, "*satisfactorily settled*," [that is, to its own mind,] of an abundant crop of wheat in Illinois, next endeavors to show, that prices will not necessarily rule low during the year. We will make such extracts from the reasoning of the writer, as may be deemed of interest to our readers, and leave them to judge of the probabilities of the correctness of the conclusions to which he has arrived. He says:—

"In the first place, we have to remark that large as our surplus is, the amount to go upon the market will not be as great as some would suppose who are not fully informed on the subject. The crop of 1855 was but little short of the estimate we have made for 1857. Of that crop only about twenty one million bushels were exported from Chicago.—It is to be remembered that home consumption is constantly and rapidly on the increase. Our city and village population is larger probably by twenty per cent, than it was in 1855. A larger number of operatives are employed upon our railroads than then. Stock growing is followed on a much larger scale, and the practice of purchasing stock in Missouri, Arkansas, Texas, and other States, driving them to Illinois, where corn is abundant, and feeding them for market, is now very extensively followed. Add to this, that the unusual length and severity of last

winter, and the high prices at which breadstuffs have rated the present season, have together reduced the stocks in the State to a point of unexampled lowness. Never before has a harvest found the barns and cribs of the State so near empty as the present one. From all of which it is clear that an unusually large proportion of the present year's crop will be needed for home consumption.

"In the next place, the progress of immigration Westward has opened a market for a portion of our surplus in that quarter. Kansas, Nebraska, Western Iowa, Minnesota, and Northwestern Wisconsin, will each in turn draw upon our granaries. The extent of this market will, of course, be measured somewhat by the extent of immigration in the fall and spring, and the amount of immigration will be somewhat proportionate to the largeness of our surplus crops.

"What we have said of short stocks in our own State, is true of stocks in all the other grain-producing States, and it is true also of all the great markets of the country from which the non-producing States obtain their annual supplies. Moreover, in many of the States the production of breadstuffs, from causes that we have not time now to enumerate, is annually falling off. This fact, we apprehend, is not very generally known, or due weight is not given to its importance. Let us have recourse again to the revelations of the U. S. census."

Here the writer gives comparative statements, similar to those embodied in the paper of our friend Maj. Jones, on the same subject, on another page—and then goes on to the consideration of the probable foreign demand—and gives us a new idea, (from what source he has obtained the information we cannot tell) that there is a likelihood of a market being opened for us in China—but let him speak for himself:

"We have now only to consider the probable foreign demand for our surplus to bring this discussion to a close. And here, at the outset, we are met with a state of facts analogous in one respect to those which exist here. There are no accumulated stocks either in the leading markets of the old world or in the hands of producers. Some of the countries, of which France is a notable example, that but a few years ago exported breadstuffs largely, are now purchasers in the same markets in which in other days they were wont to sell. Those mountains of grain that formerly stood out upon the shores of the Mediterranean and the Black Seas, that increased in bulk with every new harvest, that stood there protected from all weather by an impervious matting of roofs beneath which the yellow grain reposed from year to year in safety, and whose accumulated stores were a perennial guarantee to the world against famine—these have totally disappeared. The war of the Allies against Russia told the story. Odessa, Galatz, Ibrelin, Riga, Dantzig, St. Petersburg, and other famous grain depots of the old world, are not the powerful competitors that they once were. In Liverpool there are no large stocks. England will probably harvest an average crop, but she will want much of our surplus. Especially will this be the case if, as now seems to be almost certain, she have an East Indian war to fight through, compared with which the struggle with Russia was mere pastime.

"Then the events now transpiring in Asia indicate

the probability of a market for American breadstuffs in that portion of the world. The intestine war that has been in progress in China for many years has culminated in a famine of unexampled severity. It was once the custom of that government to lay up stores in seasons of abundance for years of scarcity. But its unhappy condition of late years has put this policy utterly out of the question. And now the people are maddened with hunger, and are perpetrating unheard of enormities in the work of plunder. Here are three hundred millions of people in want of bread. How shall they be supplied? Is it not probable, nay almost absolutely certain, that America alone can furnish the means of feeding them. There were but seven millions of people in Ireland in 1847, and yet we all know how the famine in that country affected the market for breadstuffs. Should China become our customer, who can estimate the effect upon prices? And that she will is much more likely than that she will not.

"We leave this subject with the strongest possible conviction that all the surplus breadstuffs of this year's production will be wanted. Prices will undoubtedly fall off from their present high range, when the new crop begins fairly to be placed upon the market. That is a natural result, and may always be expected under ordinary circumstances. But we are quite as confident that the average prices for the next twelvemonth will be both remunerative and satisfactory to the producers."

The Cincinnati Price Current says that all the leading articles are higher now than last year, while at the latter period short crops were experienced—a result the opposite of this year's harvest.

The Mark Lane Express, (Eng.) of 20th July, says :

"Another week's highly favorable weather, with some refreshing rain, has brought the country, after a period of great anxiety, to the very verge of harvest. As respects wheat, opinion gathers strength—notwithstanding some real abatements much exaggerated—that it will be rather over an average in this country. Reports are still more decided from all parts of France as to there being a great crop on the ground. Nor are these cheering prospects limited to ourselves or our neighbors. It is the same in Spain, Italy, Algeria, Egypt, the Principalities, and Southern Russia; while all America confirms the prospect of plenty. Southern Europe too has favorably commenced, but the great bulk awaits its maturity and final ingathering. Let us hope that in Britain, as well as in every part where human wants are felt, all will be safely stored. Still last year's heavy and continued rains remind us of possible changes, while the universal deficiency of stocks is convincing that old wheat must be scarce, and in great demand for mixing. What the difference of value will be, as compared with new, it is impossible to foresee; but the best samples seem likely to be relatively dear.—There is, however, some abatement already to be made from the prospective increase. The new crop of Rye in Northern Europe, from its earliness and long exposure to easterly winds, is decidedly of inferior quality and defective yield. As this is the main dependence of the poor, a large void will have to be made up by other cereals, which have nowhere so good a promise as wheat. The good appearance

of grain has everywhere told upon holders, who have been more ready to clear their stocks, though some country markets have still gone short. Independently of supplies, prices have retrograded, and a decline of fully 3*s* per quarter has been generally conceded. In France, where the range has been relatively higher, rates have become greatly reduced and quite irregular, and all over the continent the scale has been descending. America has kept comparatively firm, having taken the first and best opportunity to quit her surplus."

Since the above, advices from Moscow, under date of 16th July, furnishes the following information to the Washington Union, by which it will be seen that the principal source of supply for England and the Continent, (the former always requiring more grain than she can raise for her own consumption,) is likely to be cut off—this information appears to be authentic, and reliable, and may have an important bearing in due time on the price of grain in Europe :

"I have delayed (awaiting authentic information) reporting the almost entire loss of the wheat crops of this year in several of the most important wheat growing governments (districts) of Russia; an open winter and long drought are assigned as the causes.

"So little of the surplus grain produced one year is kept in the country for the next, that, in view of the prospective short crop and consequent inadequate supply even for home consumption, the small stock now on hand has been for six weeks or a month past rapidly advancing in price, and is now held at 75 per cent. above the spring quotations. It is stated that, except where great land transport will prevent it, all the grain will be sold and retained in the interior, little or none exported."

As to the prospects for grain in France, we never have any dependance in the statements made in French papers—the government will permit no account to be published, unfavorable to the crops, as a short harvest endangers the stability of the government.

The Fredericksburg (Va.) News, makes the following judicious remarks on Crops and Prices :

"It should be remembered that so many elements enter into the formation of a sound opinion, that no judgment at this time can be implicitly relied on. No man can tell to-day how many bushels of wheat he has made himself unless he has threshed it. Much wheat already cut is now suffering from our recent frequent rains. It may easily be seen therefore that it is folly to consider the present prospect of the European crops as a certain measure of their future amount. They may turn out to be abundant—but if a man cannot tell the amount of wheat made in his own county after harvest, it is not safe for him to assert the probable amount to be made on a continent months before harvest. The abundance of the crops, the stocks on hand, the facilities of transportation, and the tricks of speculators, all enter into and determine eventually the price to be obtained. Farmers, at the same time, should not complain of Merchants because their views do not coincide. Buyer and seller cannot be expected to think alike. One sells for as much as he can get, and the other buys for as little as he can. Besides, the foreign demand

generally causes high prices for wheat, when the miller cannot make money because there is not the same or a proportionate demand for Flour. The English prefer to import Wheat and manufacture for themselves."

For the last few months, no paper, we believe, was more strenuous in its assertions of the great yield of the Wheat crop in the North-west, than the "Cincinnati Price Current,"—but so far as that staple is concerned, there appears of late to be a decided change in its views, and it has now found, what we stated in our journal for some two or three months past, was the fact, that the winter wheat at the West had been nearly all killed, and that from the late period at which the spring wheat was sowed, the chances were decidedly against it, as the rust would almost inevitably strike it. The above journal, in its issue of the last week in July, (and copied into the Commercial papers of Baltimore, of 1st August,) has the following, to which we call the especial attention of those expecting large supplies of flour and wheat from the West :

"The advices we have received during the week continue favorable for abundant crops generally. Oats, grass, potatoes, flax and corn are doing well. We are sorry to find, however, that it is extremely probable the spring wheat has been seriously injured by rust, and as a general thing the late wheat has been injured more or less in Indiana, and throughout the southern portion of Illinois. In northern Illinois and Iowa very little winter wheat escaped winter killing, so that the great bulk of the crop is spring, which is, as we before stated, no doubt badly injured. The crop, however, taking the country through, will be a large one. In this State and Indiana the wheat harvest is nearly over, and the fall sown wheat, with rare exceptions, is splendid. In Kentucky and all the Southern States the wheat is all cut and saved in the best possible condition, so that even if the crop should be an entire failure in the northern portion of Illinois and all Iowa, the loss would not be felt sensibly."

The state of the wheat daily offered at our Corn Exchange, is the best refutation to the assertion in regard to the wheat in the Southern States being "cut and saved in the best possible condition."

Dr. H. H., writing to the Editors from Illinois, says :—

"Our harvest is over. Fall wheat was short and injured by rust and the chinch bug. Spring wheat a full good crop. Corn suffering from drought. Though having a farm in Maryland, I am also farming on the Prairies, but can fully endorse your remarks about Prairie farming, and we are longing to get a chance to sell out here without loss, and go back to old Maryland."

GRAIN SPECULATORS.

A recent failure of a Merchant in New York, for about a million of dollars, said to have been caused by that of others in Rochester, and all connected with the grain trade, shows the strong motives prompting the efforts made to regulate the prices of grain. In Chicago, Ill., also a number

of failures have taken place, of persons engaged in speculating in grain. The Times of that city gives the following as the *modus operandi* of these gamblers, which we have good reason to believe is not confined to Chicago, Rochester and New York :

"A. has not a peck of corn in his possession, but he sells B. 50,000 bushels, at fifty-three cents per bushel, to be delivered thirty days hence. When the contract time arrives, corn may have advanced to seventy-eight cents, and Mr. A. is called upon for the corn, or the "difference," which amounts to \$12,500. If he is "short" of the requisite funds, he goes under, and perhaps drags down with him the party to whom he sold the corn, who, on the strength of the purchase, may have sold in turn 50,000 bushels to a third party at fifty-eight cents, deliverable on a future day, who instead of making \$3,900 by the transaction, as he was fondly anticipating, finds himself out of pocket to the serious amount of \$8,600. The half a dozen failures that have occurred among our corn dealers within a few days, exemplify and reprove this vicious, reckless system of transacting produce business. We withhold a list of names of failures in our possession, for the present.—Several who have not failed are badly crippled from the same cause—selling short—some of whom may manage to keep off the breakers, others will be apt to go ashore before long."

The New York Courier states that "great competition is going on in that city in buying up the new crop of Southern wheat, which has resulted in prices being paid higher in proportion than present prices of flour, and as the general expectation on change is that flour must decline when the new crop begins to come in, this movement excites much comment, for it is felt that no effort of speculators can sustain prices in the absence of a strong demand and with a full crop."

STATE SHOWS, 1857.

Alabama, at Montgomery,	Oct. 27, 28, 29, 30,
California, at Stockton,	Sept. 29 & Oct. 1, 2,
Canada East, at Montreal,	Sept. 16, 17, 18,
Canada West, at Brantford,	" 29, 30, & Oct. 1, 2,
Connecticut, at Bridgeport,	Oct. 13, 14, 15, 16,
East Tennessee, at Knoxville,	Oct. 20, 21, 22, 23,
Georgia, at Atlanta,	Oct. 20, 21, 22, 23, 24
Illinois, at Peoria,	Sept. 21, 22, 23, 24
Indiana, at Indianapolis,	Oct. 4, 5, 6, 7, 8, 9, 10
Iowa, at Muscatine,	Oct. 6, 7, 8, 9
Kentucky, at Henderson,	Oct. 12, 13, 14, 15, 16
Maine, at Bangor,	Sept 29, 30, & Oct. 1
Maryland, at Baltimore,	Oct. 20, 21, 22, 23, 24
Massachusetts, at Boston,	Oct. 21, 22, 23, 24
Michigan, at Detroit,	Sept. 29, 30 & Oct. 1, 2
New Hampshire, at Concord	Oct. 7, 8, 9
New Jersey, at New Brunswick,	Sept. 29, 30 & Oct. 1, 2
New York, at Buffalo,	Oct. 6, 7, 8, 9
Ohio, at Cincinnati,	Sept. 15, 16, 17, 18
Pennsylvania,	Sept. 29, 30 & Oct. 1, 2
South Carolina, at Columbus,	Nov. 10, 11, 12, 13
Tennessee, at Nashville,	Oct. 12, 13, 14, 15, 16, 17
United States Agricultural Soc. at Louisville, Ky.	Sept. 1, 2, 3, 4, 5, 6
Vermont, at Montpelier,	Sept. 8, 9, 10, 11
Virginia,	Oct. 28, 29, 30, 31
West Tennessee, at Jackson	Oct. 27, 28, 29, 30
Wisconsin, at Janesville,	Sept. 29, 30 & Oct. 1, 2

American Institute, at New York, Sept. 29 to Oct.

TIME OF SOWING PEAS.

In the hope of seeing the field pea successfully introduced as an aftergrowth of the crop of oats, we suggested to those who could conveniently do so to make the experiment of sowing the pea to a small extent with their oats by way of trial. We did so on the strength of the experience of others as well as our own, during several seasons. We had confidence enough in the practice to seed this year with the whole of a small crop of oats, peas put in at the same time. The result is that we have lost the peas thus sown; the aftergrowth being very scattering. The weather proved too cold, and they either rotted in the ground or perished as soon as they came up.

We are sorry to learn that others have lost their seed from too early sowing. We especially recommended that those who would try the experiment with oats, should do so on a small scale. We do not know that any one has lost who sowed after the middle of May, the time we recommended for general sowing. The past spring, it should be borne in mind, was a very unusually severe one.

PRESERVATION OF HUMAN EXCREMENTS AND URINE.

In answer to our correspondent of Prince Edward county, Va., with respect to the preservation of human excrements as manure, as also to that of urine, we have to say that there are four agents that may be used for the purpose, viz., *Sulphate of Lime, (Plaster,) Sulphate of Iron, (Copperas,) Pulverized Charcoal, and dilute Sulphuric Acid.* If pains be taken to sift plaster over a privy, or vault from day to-day, or sift pulverized charcoal over the surface of the receptacle, or to pour a solution of copperas, or dilute sulphuric acid, over the surface, say every few days, little or no disagreeable effluvia will be emitted, whilst each substance will act as a conserve of the ammoniacal gas liable to be generated by both the excrement and urine. We have usually used plaster, preferring it on account of its cleanliness, and the facility with which it may be applied.

We shall enter more fully into the treatment of these topics in a few weeks.

THE HAMPSHIRE BREED OF SWINE.

To the Editors of the American Farmer:

I visited yesterday the farm of our friend, Peyton Johnston, near Richmond, and saw his fine stock of different breeds; among them the Hampshires which he imported last year, and which, so far as I am capable of judging, are superior to all I have seen, there or elsewhere. He cannot supply the demand for them, which is largely in advance of the supply. Mr. J. is a careful and judicious breeder—one of the most public spirited and liberal of our people—and of course is relied upon with undoubting confidence, as he should be by all who know him.

Very respectfully,

W.M. H. RICHARDSON.

The following from a letter to the editors of the Farmer, from Gloucester Co., Va., of Aug. 13th, gives a description of the state of things in that county, similar to that in a great many other sections of the country:—

"In my portion of the county we have had a continuation of bad weather since the commencement of harvest; the wheat was harvested in the rain, shocked in the rain, and farmers have been threshing in the rain; the consequence is, that the wheat is very much out of condition, sprouted, tough, &c. We have had too much rain for corn, whilst other portions of the county have suffered for the want of it. The adjoining counties have been flooded with rain, and have suffered severely. The corn crop in this neighborhood though very late, looks well."

From another correspondent, dated Kingston, Aug. 2d, 1857:—

GENTLEMEN:—I do not believe that the very ancient individual—the oldest inhabitant, ever experienced such a season as we have just passed, and if any apology is necessary for troubling you with this, you must set it down to my desire to keep you posted.

June 29, began to cut wheat, interrupted by rain. June 30, rain nearly all night; 8 o'clock, A. M., rain. July 1, cloudy all day; afternoon, rain. July 2, cloudy; rain last night; afternoon, rain. July 3, cloudy, cold; sleep under a blanket; noon, rain. July 4, cloudy, rain. July 5, cloudy, cool; sundown, rain. July 6, cloudy, cool; cutting wheat all this time when the rain would permit; occasional showers up to July 20; began to cut oats; afternoon, rain. July 21, hard rain in the night. July 22, rain. July 23, cloudy, rain and hail—tobacco and corn much injured. July 24, rain; 25, cloudy; 26, rain; 27, rain; 28, rain; 29, rain; 30, hard rain last night; 31, rain, hard rain last night. Aug. 1, hard rain last night. Aug. 2, cloudy, hard rain last night.

Yours, &c.,

L. S. GILLIAM.

CROPS IN SOUTH CAROLINA.

BEAUFORT, S. C., 18th July, 1857.

To the Editors of the American Farmer:

MESSRS. EDITORS:—As you seem glad to learn the prospects of the crops in all parts of the country, I give you the results of my experience, observation and information. Wheat has begun to be grown in this section, and the little that has been sown has yielded so well, I think that much more will be sown another season. I sowed about 8 acres which yielded about 8 or 10 bushels per acre, all of which, except the little I may use to make Graham or whole meal bread, I will keep for seed, with a view to grow it for a part of my market crop, in connection with rice and long cotton. I tried about one acre with it on an inland rice swamp, and it did very well for the very poor chance that it had, having been constantly eaten down close by the stock of one of my neighbors. I have always been under the impression that most of our inland swamp lands, which are black clay, where they can be drained, are unusually well adapted to its growth, and my experiment confirms me in my belief. We can easily grow a crop of rice, cut it off in August or September, plow and sow in wheat, reap it in May or June, bank the land and sow cow peas

which will be ripe by 1st November following, making three good crops in less than two years, besides dividing our risks. The oat crop has not been a large one, owing to the long continued drought, but it is not a grain either generally or largely sown. Our corn crops from all accounts, are unusually promising, and the weather was all that could be desired, having moderate showers almost daily, and the early plantings are in silk, and some further advanced. Even should our corn crops turn out well, I hardly think that we will make enough for our own consumption, for almost every planter is now buying corn; the consequence of which will be, that the new crop of corn will be broken in upon as early as it can be used, thus consuming in advance a part of next year's supply. Good crops of peas and sweet potatoes may, however, help us out. Our rice crops are unusually unpromising, and a fair average crop cannot be made in this section of the State. The short rivers have been salt all the season, and a good part of one of the long ones has not been in much better condition up to this time. The inland swamp crops are almost entirely gone; those on the short rivers have suffered much, and are not yet out of danger, and cannot hold out much longer. I have never known the chinch bug so bad during an experience of more than 20 years. In the spring our corn crops were very much checked and stunted by them, and for some time past they have been rapidly destroying the crops of inland swamp rice, and made considerable inroads in the tall swamp crops, which latter I have never seen before. The grubs are also busily engaged in destroying the latter crops, and nothing but a flood can destroy either them or the chinch bugs. We have very good and refreshing rains lately, but they have been very partial, and confined to our immediate seaboard, and although quite enough for our highland crops, are far from sufficient for rice. The cotton crops are quite promising every where, though a little backward; but there is still season enough for the sandy soils to produce a fall crop; but I do not think that the strong lands of the main can do as well without an unusually late fall.

By the bye, I am quite surprised that more Graham or unbolted wheat flour is not used. It is true that it does not make so white bread, but in return it makes more; the bread is much sweeter, more nutritious and wholesome, especially for delicate persons, and it keeps fresh much longer, and almost every farmer and planter can grind this flour.

As almost every husbandman is cultivating the sorgho sucre, but there seems to be much doubt, if not much difficulty anticipated in converting its juice into sugar, I would call your attention to the process of Mons. Melsen, of Brussels, published in the Patent Office Report for 1849 and '50 I think, in which the *bi-sulphate* of lime is highly recommended for crystallizing the juice of the beet root. A summary of the article in the Farmer might prove interesting to many anxious to experiment in the sorgho sucre.*

You are probably aware that on our sea islands where the fine long stapled cottons are grown, we are in the habit of manuring a very considerable part of our fields with a compost made by hauling leaves from the woods, sedge, (dead salt marsh grass,) straw, &c., into cow pens in which

our stock of cattle and sheep are penned at night, and a pen lasts from one week to one year. This plan we are obliged to pursue to a certain extent for the health and comfort of our stock, but beyond that necessary point, would it be better to go on adding litter rapidly, with the double labor of hauling into the pen at one season, and hauling out at another—the latter generally a very busy and pushing one, or would it be better to haul out and spread, say 6 to 9 months beforehand, this extra litter upon the fields where the manuring is wanted? I have read Dr. Baldwin's views published years since in the *Plow, Loom and Anvil*, but though I fully agree with him in many things, I cannot in all. His theory is, that shade or cover is manure, &c. From 1st April to about 1st August, we can do little else than cultivate our crops, but after the latter date we have times when we could attend to other matters. Is litter spread out upon land a manure sufficiently good to pay for the labor, &c., and would it answer as a substitute for our cow pen compost as now made? Mr. Ruffin has mooted this question, could you not give us your own views, and get his for us? We want much light on this important question of manures and manuring.

Your old subscriber,

R. C.

We give with pleasure the following from an esteemed correspondent, and wish he had allowed us to use his name in connection with it. His observations coincide remarkably with the tenor of our own suggestions in the article upon wheat culture, and with our explanation of Mr. Rouzee's "problem." —Eds.

MR. ROUZEE'S PROBLEM.—PREPARATION OF WHEAT FALLOW.

To the Editors of the American Farmer:

Your correspondent, Mr. Richard Rouzee, offers in the last number of the Farmer, "A Problem for Farmers to Solve." Mr. R. says:—"At seeding time the pea vines on the fallow were turned under, and the crop of wheat is not more than half as good as that produced upon the ground where the vines were removed."

Our experience after plowing in green crops has been the same, when plowed in just before seeding time. But if Mr. Rouzee had have plowed his ground sufficiently early to give it time to settle and form a compact bottom, or have given his ground repeated harrowings, until the ground under a depth of two or three inches had become firm, (which repeated harrowings will do,) in my opinion he would have made a crop of wheat.

My mode of preparing a fallow for a crop of wheat is, to plow the ground deep, and as early as possible after harvest, then just before seeding, to harrow until there is produced upon the top a finely pulverized soil of about two inches in depth, beneath that, the more compact the soil, either from the length of time the ground has been plowed, or from harrowing, the better. This preparation has several advantages: the seed is planted at a more uniform depth by the drill, the wheat will grow faster, if the fall season should be dry, and should the fly cut the wheat—which it generally does in the fall—it tillers much better than if sown upon loose ground. G. M. E.

Cecil Co., Md., Aug. 12th, 1857.

N. B.—A dressing of two bushels of plaster per acre would, if sown upon the pea vines before plowing, have been of great benefit to the wheat.

* We will give it in our next.—Eds.]

SURFACE MANURING—LIME EXPERIMENT.
To the Editors of the American Farmer:

GENTLEMEN:—In your July No. I see an article upon surface manuring, a practice which I have been pursuing for many years, especially with my stable manures, on account of the grass seeds from my hay, with which manures I cover the poorer spots in my grass fields, and have found it the most profitable use I can make of this kind of manure, as there is no spot which can not be made to produce well in grass thus liberally dealt with. I have now a plat of orchard grass thus treated seven or eight years ago, from which I have last, and this year cut as heavy a crop of hay as I ever saw grow upon any high land, and as good as I ever saw in Virginia on any lands. This was my favourite mode of applying all of my home-made manures, until the chinch bug drove me from it, and as soon as they leave us entirely, I shall return to that mode of applying all my manures—and thank God, they with the joint worm, have nearly left us in these parts.

Having been confined pretty much at home, since my return from the south, I am not able to speak knowingly of the crops even of my own county, yet from others I learn the wheat and oat crop of Albemarle is a good one. I know my own to be the very best crop I have ever made, which I attribute in a very great degree to the very small application of lime made in January or February, by hand as I would plaster, which plan I learned from a communication made in the *Southern Planter* some years ago, by a Mr. Cockran, of Augusta county, Va., who sowed a bushel of lime per acre upon alternate beds of his growing crop of wheat; upon those beds thus sparingly treated he cut a fine crop of wheat; upon those not so treated he got little or no wheat, owing to the fly, joint worm and chinch bug—now I have been thus treating my wheat crop for three years, and have made three of the best crops of my life. Upon the present crop of 12½ bushels of wheat seeded, I used 180 bushels of sifted lime, and it has been pronounced by many gentlemen who have been to look at it, to be the best crop in the country, and by a Loudon farmer equal to any he ever saw. Last year I made upon this farm 16½ bushels for every one seeded; this is a better crop, and yet strange to say, none of my neighbors will try it—they come and look at and admire it, but say it can't be the lime, for the dose is too small; it's too cheap and too easily done—it must be something else. "Tis true, I use guano, and so do they, and I used guano years before I thus used lime, but these three crops upon which I have thus used lime, are three of the best crops of my life; so I am well convinced lime has something to do with it. My wheat crops are not only greatly improved since I adopted the plan of this small application of lime, and I have far less chinch bug, fly, or joint worm, than any of my neighbors, but my grasses have also equally improved; and all agree, that in the last three years my farm has improved equally if not faster than any other in our rapidly improving country—now I firmly believe it is greatly owing to the lime, though applied in even these very small doses. I am well convinced from a close observation this is the best mode of applying lime, for I have used it in doses from 20 to 40 bushels, scattered from the wagon, and my neighbor, who has more means, and can't be beat as to untiring efforts in all good things, and is one of the very best farmers in all things, for his age, I have ever seen, has applied his lime in large and heavy doses, without the expected results,

whereas, I have beat him in the last two crops of wheat per bushel seeded; from these facts, I am well convinced the small dose application is the best; in this way more surface can be gone over, and the per acre application is so small a matter that any farmer, however small his means, or great a distance he may be from the lime kiln, can safely try the experiment, and if it does little or no good, it can't injure him much. I believe there are lands upon which lime will do but little or no good, and there is lime which is not so good for agricultural purposes as others. By a slight application of this kind it can be fairly tested at so slight a cost, that a failure can't hurt much. My neighbor and friend Mr. D. G. Smith, a close observing and practical farmer, from the wheat growing district of Loudon county, Va., made an experiment upon his last crop of wheat, with the lime from my quarry, and the beautiful lime from western Virginia, and says the difference was greatly in favor of this, the Eastern vein of Va. I don't make this statement from any interested motives, for I don't burn lime for sale, nor do I ever expect to do it, having refused to furnish my neighbors, who wanted thousands of bushels, but merely burnt a kiln or two for my friends to test it for their satisfaction and my own use. Upon some experiments made in the last twelve months I am also well convinced, the plan of improving lands given by Com. A. P. C. Jones, is the one we all should pursue—I mean a thorough and heavy improvement at once per acre—it has paid me well.—For several years I have used the Peruvian Guano in drills for tobacco to a good account, and find the best mode is to lay off the furrow with a one horse McCormick plough, and put the guano in it. The coulter is too shallow; any one can see the difference by calling and taking a look at my present crop, a fair experiment. This was written for your August No.; it is now the 10th August; so if any good can come out of it, let it come in the September No.

Rains to an injurious effect on wheat, oats and tobacco and hay, all of which are greatly injured, a heavy loss. Chinch bug in abundance—corn a month behind hand—a dry September or an early frost, may cut us short.

GEO. C. GILMER.

[The suggestions made by Mr. Gilmer will, we have no doubt, attract the special attention of our readers—the experiment of his lime application should be tried generally.]

[*For the American Farmer.*]

CERTIFICATES—THEIR USE AND ABUSE—No. 4.

"Fools learn by experience," but what shall we call those who neither learn by their own, nor the experience of others? The experience of an individual may be worthless and mischievous if viewed alone, but when associated with the experience of many, it often becomes exceedingly valuable.

Upon this principle, millions of dollars are invested in life insurance companies. Nothing is more uncertain than life, and yet its value has been calculated with certainty. If the absolute value of human life is 35 years, by averaging 1000 lives, and the insurance company takes the risk as if 30 were the average, it is manifest that one-sixth of the money invested must accrue to the stockholder, and if a mutual insurance company, then every one who insures his life gets more than the value of his money, or he has the greater blessing of life pro-

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longed for the benefit of others. But suppose the insurance company, (although a mutual one,) takes the risk at 40 instead of 30; then it is equally manifest that ruin must result, and every stockholder is engaged in building up a scheme that must inevitably fail, and not only deceive but injure thousands.

If it has been proved then that the average value of life is an important fact, (although few are interested in it as a speculation,) it is not of more importance that we ascertain the exact average value of materials which we can do without, or for which we can obtain substitutes, and in which the multitude are speculating.

Demand for some article may produce a fictitious value, as in the case of *morus multicaulis* buds, but it is impossible that their value should have been as much exaggerated, as Peruvian Guano may be, because it is more generally useful, and sometimes remarkably productive even at the highest price.

If as in the case of life insurance, it were clearly proved that \$35. per ton were the average value of Peruvian Guano, when applied to 1000 farms after noting its effect on a full rotation of crops, all the certificates that could be published would not raise its price to \$65. Legislation and the resolutions of conventions only stimulate the morbid excitement of the public mind on such subjects; a quiet appeal to statistics would soon knock down the price of Peruvian Guano to that of the first cargoes. The farmers are now insuring their crops at an unknown risk, and the Peruvian Government has succeeded in humbugging them into the belief that insurance is worth double its cost 10 years since.

(a) Peruvian Guano has an *actual* value, say \$35., at which price, when applied to 1000 farms, it would pay 10 per cent. on an average on first crop, but out of the 1000 at least 50 could show 100 per cent. profit by its use at that price; and say 25 entire failures.

(b) Again distinct from its actual value, it has a relative (empirical) value to other manures; "De Burg," for instance being \$42, say the relative value of Peruvian Guano is \$48 per ton; but when applied to a full rotation of crops on 1000 farms its relative value would fall down to 40, because although the first crops might average 10 per cent., and 50 experiments might average 100 per cent., yet on 2d and 3d crop of rotation while the Peruvian would fail unless repeated, and if repeated would exhaust the land, (as ammonia did in "the 7 years experiments of Laws and Pusey,") I say, while it fails, or exhausts, De Burg's holds its own, and at the end of the rotation the natural resources of the land having been husbanded, and the improvement of the crops having paid 10 per cent. over the cost of manures—the tables are completely turned.

(c) Entirely distinct from (a) and (b) is the *market* value: anything is said to be "worth what it will bring," whether it be a lottery ticket or *moriculais* buds. Demand is the basis of this kind of value.

Special value may be considered as distinct from (a) (b) and (c) for instance—salt and plaster are special manures, and have a special value; moreover, special manures may be very generally useful. Plaster for instance is specially valuable on account of the cheap form in which it restores sulphuric acid to a soil exhausted of this element; and plaster is more valuable as a special manure than salt; so much so that if the average results were obtained of the application of each separately on 1000 farms, it is probable that double the cost of the plaster

would be paid on an average, but it is not probable that the salt would pay more than its cost; but out of the 1000 could be obtained one or two certificates like that of the Earl of Zetland at Aske Hill, showing that salt alone could excel all other manures.

Certificates I think exceedingly valuable, and capable of accomplishing three great objects. 1st. As in the case of the Earl of Zetland, and in the experiment of the Prince of Salm Hotsmar, they may prove that a certain substance (salt for instance) is really a manure and capable of increasing a crop seven-fold over any other manure; (where it is deficient in the land, and the other manure does not contain it.) 2d. They are valuable in enabling us to find the actual value of all manures, provided a sufficient number can be obtained. 3d. They are capable of fixing the relative value of either general or special manures, (taking into view the permanence of their effects, and the proportion of entire failures in each case, by averaging 1000 experiments or more)—because, like stocks, those that pay the largest dividends are apt to be the most precarious.

Certificates are abused when they are employed to vaunt empirically any special manure, which happens to be the hobby, whether it be lime or plaster, salt or ammonia, or phosphoric acid; none of these alone, or in excess, can be as generally, or as permanently valuable, as a mixture of all well blended. If we buy Peruvian Guano, it is mainly on account of its ammonia, and it is therefore a special manure, adapted to supply one of the defects almost universally produced by severe cropping. Under these circumstances, if we pay \$60 per ton for Peruvian Guano, we are paying \$400 per ton for ammonia. Now I wish to propose a plan by which ammonia can be supplied less expensively; and I ask the members of the Maryland State Agricultural Society to unite with me in trying the experiment, and give me the result.

I have ploughed up three acres of my oat stubble; 3 quarts of turnip seed were then mingled with 3 bushels of phosphates, and one bushel sown to each acre. Two barrels of mixed phosphates were then applied to the acre in the centre of this turnip patch. Now when the turnips have matured I will turn them under, and put the whole field in rye or barley, and note the result. An acre of land that is capable of yielding 25 bushels of wheat will produce 5600 lbs. of turnips containing 1400 lbs. of albumen and other protean compounds that yield more ammonia than one ton of Peruvian Guano, during their decomposition. The crop of wheat on the same land would yield about one-fifth this quantity of ammonia ONLY. ~~It~~ The turnip is a plant that has the power of assimilating nitrogen or making ammonia of the atmosphere, while wheat must do without it unless it can get it ready made in the soil. An acre of turnips contains 300 lbs. of ammonia, worth \$60, as a manure; whereas, an acre of the same land in wheat would only yield about 60 lbs. of ammonia. As phosphates, and especially the mixed phosphates are the special manures for turnips, I think I can recommend others to follow my example, and I request that the experiment may be fairly made and reported. I prefer De Burg's mixed phosphates for the experiment, because it uniformly contains more ammonia than any other mixture of the kind, and also a sufficiency of Potash, Soda, &c. &c., equally important. The object of mixing the turnip seed with a bushel of De Burg's compound is to enable the laborer to sow it evenly, and there is no risk in so doing provided it is mixed and sown the same day.

I have a field beautifully set with timothy, which was sown in 1854 by mixing the seed with mixed phosphates, and distributing the mixture with a guano-spreader. In the autumn of 1855 I succeeded in setting two other fields with timothy by using the mixed phosphates, but the tenant seemed to think that in the latter case the timothy was forced forward too rapidly by the manure to the injury of the wheat, as some of the stalks headed with the wheat last year. However, I had a good crop of wheat, whereas, this year my wheat is a failure, although apparently a good crop; attributable to late sowing without any fertilizer except a good dressing of stable manure.

DAVID STEWART, M. D.,
Chemist of Md. State Ag. Soc., St. John's College,
Annapolis, Md., August, 1857.

BICKFORD & HUFFMAN'S DRILL.

To the Editors of the American Farmer:

MESSRS. EDITORS:—In my communication upon the subject of drilling wheat, which was published in the July number of the American Farmer, I made the following remarks in reference to the Guano Attachment of Bickford and Huffman's Drill:—

"The guano spindles which have four wire arms just at the bottom of the box, should have four additional arms inserted in them—1 at $2\frac{1}{2}$ —1 at $3\frac{1}{2}$ —1 at $4\frac{1}{2}$ —and 1 at $5\frac{1}{2}$ inches from the bottom of the box, observing to place them on opposite sides. Any one can insert them in a few minutes by using a gimlet of proper size, and wire $\frac{1}{4}$ inch in diameter. The additional arms, by stirring the guano from bottom to top of the box, will prevent it from arching."

Since that publication, I received from Messrs. Bickford & Huffman a letter in which, upon that subject, they remark as follows:—

"We think one pin (or arm) in addition on each shaft, (or spindle,) placed about half way up the box, would effectually prevent arching. The objection to more arms is, that more power is required to drive the machine, (because of increased resistance,) and that the more guano is stirred, the damper it becomes."

"The first drills we made had but one arm three inches from the bottom of the box, (in addition to the four arms at the bottom,) and in all our experiments, and some practical use, we never knew the guano to arch; and we came to the conclusion that the lower arms were alone necessary."

"Your letter is the first intimation we have received that there was any danger that the guano would arch, and we must go back to the first plan, and put in an additional arm."

In the first drills sent out by Bickford and Huffman, viz., in the fall of 1855, the guano certainly did not arch, for the growth of the crop drilled by them, even in very wet weather, was perfectly uniform—(I drilled at least 60 acres with one of them in very unfavorable weather;) and as it had by some means been impressed upon my memory that those drills had four upper arms, I therefore recommended the introduction of that number of them in drills, which have only the four lower arms.

I was mistaken, however, in my memory, as Messrs. Bickford & Huffman say, there was but one upper arm in those drills; and as the one arm was sufficient, and their objections to more appear to be valid, I deem it a duty to revoke my former

opinion and advice, and to recommend the adoption of that of those gentlemen, as respectively contained in the above quotations.

Your obedient servant,

M. TILGHMAN GOLDSBOROUGH.

Ellenboro, near Easton, Md., Aug. 6th, 1857.

WHEAT CULTURE IN DELAWARE.

Proceedings of the Quarterly Meeting of the Agricultural Society of Kent Co., Del., held in Dover, August 4th, 1857.

The Society was called to order, the President, HENRY COWGILL, in the Chair.

The President stated that the chief business before the Society was the condition of the wheat crop for the present year. Between the 8th and the 15th of last October, he sowed the blue stem white-wheat. One half his ground was fallow. He plowed in 200 pounds of Peruvian Guano to the acre, and drilled in with the seed about 50 pounds more. The balance of his ground was oat stubble. He plowed in equal quantities of barn-yard manure and Peruvian Guano. The fly injured both—he could perceive but little difference.

G. W. S. Nicholson stated that last year he selected a small field on his farm in eastern Sussex, the soil of which is a sandy loam, at the time in corn. This field had never been manured with guano, phosphates or even lime. Early in October he had plowed in 300 pounds to the acre of Mexican and Peruvian Guano, (in proportion of 6 tons of Mexican to 1 ton of Peruvian.) About the 18th or 20th of October he sowed the blue-stem white wheat. With the exception of slight injury to the front part of the field—which was a ridge of two feet running parallel with the road—by the storm of January, the wheat came to harvest uninjured by fly, worm, smut or anything of the kind, and made a larger yield than he supposed the soil capable of producing.

He further stated that he had noticed that more crops had been injured by early sowing than by late. All the fields of wheat which had been completely destroyed by the fly in this county were sown before the 1st of October. As an exemplification of this, he instanced a field of wheat near Leipsic, one half of which was sowed on the last Saturday of September, the other half on the Monday succeeding. Mr. J. C. Wilson, its proprietor, noticed that the portion last sowed was evidently less injured by the fly than that first sowed.

He recommended that farmers procure for seed wheat, that which had entirely escaped injury from the fly.

Mr. T. B. Coursey next gave an account of his crop, which was sowed at the usual time, between the 5th and the 15th of October, and yielded well. He recommended that time of sowing. He also gave an interesting statement of experiments he was making in the various guanos and phosphates, and stated that Allen & Needles Super-Phosphate, at present, promised best.

Mr. G. B. Dickson next spoke of the experiments he had made with the Colombian Guano, which, the second and third years, turned out finely. He also stated that the white wheat raised this year in Kent county, Del., passed in Philadelphia only for good red wheat—that the best specimens of white wheat he had seen were those

which had been sent up the railroad from western Sussex.

Mr. T. B. Coursey presented a paper from Manlove Hayes, Esq., Cor. Secretary of the Society, which was read as follows:

In the notice for this meeting of our Society, it was proposed to enquire into the injury sustained by the wheat crop of the present year from the ravages of the Hessian fly, and whether any means can be adopted to ward against the future depredations of this insect. This subject has received more attention in our community for the last two months than any other, of an injurious nature to the crops, within my recollection. The fine appearance of the wheat in this county soon after the opening of spring held out for a short time great hopes of a bountiful harvest—though a field might occasionally be seen which had been injured to some extent by the hard winter, there was no serious cause of apprehending danger to the crops generally, until late in the spring. So far as I have been able to learn from inquiries I have made in this county, the fly was not observed in the wheat until about the 24th of May. In noticing my own fields at that time, I perceived that the improvement of the wheat was suddenly arrested; and I at first attributed it to some change in the weather unfavorable to its growth, but on the 26th I made a close examination, and the real cause soon became apparent. The insect was then in the white or maggot state, lying close to the stem of the plant under the blade below the first joint; but few of the larvae had arrived to the age when it assumes the brown or flaxseed state. I placed a number of stems—some containing as many as eight or ten of these insects—in a glass jar, the top of which was covered with paper punctured to admit the air. In a few days their transformation began to appear, and in about one week all had changed to that peculiar brown color by which it is so well known; and in which state, according to the best authorities, it requires no further nourishment. I examined my prisoners daily, heartily wishing the whole race as well secured. On the 9th of June—being eleven days from the time they were enclosed in the jar—the first winged insects made their appearance; resembling mosquitoes, but in size much less, with wings semi-transparent, of a dark color and not so pointed. I noticed several of a larger size, which may have been the females, but with all my attention I could not discover any depositing their eggs; they lived only four or five days, though others continued to cut out of their shells from time to time, and fly about the jar for ten days or two weeks after the first made their appearance. By this time complaint had become general throughout the State, the fly being discovered further north after it had shown itself here. The wheat in many fields was so much injured, that the owners, despairing of their crops, plowed them up and planted them in corn; other fields were taken in grass that outgrew the wheat, which was literally smothered by the rank growth of timothy and clover. About the middle of June as the wheat straw became less succulent, the enemy to its growth appeared to have become surfeited with its food, and was found either in the pupa or flaxseed state, or had cut out, leaving the brown shells adhering to the stems.—The eggs were at that period, doubtless on the blades and upper part of the stems of the wheat

and grass which abounded in the fields, as the female insect has been seen to do by close observers; how long these myriads of eggs remain, before a new generation of this interesting family see the light, I must leave for some one better acquainted with the habits of the insects to decide; (valuable information on this point may be found in the *Farmer's Encyclopaedia*,) the time is said to vary from four to fifteen days and even longer, under circumstances more or less favorable. Thousands of insects in the flaxseed state could be seen in the stubble when the wheat was reaped, and it is reasonable to suppose that the fly will continue to deposit its eggs and hatch out as long as the heat of the summer and autumn sun is sufficient to admit of its development and transformation.

Though I did not examine my wheat last autumn, I have but little doubt the larvae was in it during the winter, and if so, there appears to be no degree of cold that will not destroy the wheat which cannot be endured by its greatest enemy. I had several acres of wheat covered with water after the snow drifts had melted in February. The ground was frozen and the water did not subside for a week or more. The wheat was not materially injured by it, in fact looked greener in June than other parts of the field which had been much exposed to the frost and cold. I examined the wheat at that place with some curiosity, and was surprised to find the fly as prevalent there as elsewhere in the field.

Though the Hessian fly is known to injure the wheat to some extent almost every year, such a visitation as we have been subjected to the present season is unusual, and by many old farmers it is believed that its coming in swarms like the locusts, is periodical; for nearly twenty years fly has not generally caused serious alarm, and may there not be some natural cause operating to produce these destructive insects in such formidable numbers, and over so large a space at the same period?

It is difficult to devise any practicable plan for destroying this great enemy to our crops. Its ravages have extended far beyond the limits of this State. I have witnessed fields in that fine wheat growing region, Talbot county, Maryland, on which the greatest care had been bestowed by the owners, that have not produced sufficient grain to pay expenses of seeding. Accounts from the Western Shore of Maryland, and many parts of Virginia are to the same purport. As for the yield of wheat in this county, I am from inquiry and observation, satisfied, that it is at least from fifty to sixty per cent. below an average crop. The frequent rains in the spring and early autumn were favorable to the fields which had been partially destroyed by the fly; they induced a second growth from the lateral shoots, which would under favorable circumstances have produced from a fourth to half a crop, but the straw was reaped green or ripened late, and the quality of the grain was materially injured by mildew and rust—the stems in which the fly is found seldom produce a perfect ear.

Notwithstanding the entire destruction of some fields of wheat and the partial destruction of others, there are occasionally rare exceptions where fair returns have been obtained by the husbandman.—These exceptions, it might be supposed, would afford to the inquirer some information by which he could be governed in seeding the future crops; but unfortunately, inquiry only adds to the diffi-

culty of solving the cause of this difference. Instances have been noticed where the same variety of wheat had been sown at the same time on two fields equally fertile, within a few hundred yards of each other, one of which was destroyed and the other yielding an average crop.

After the prevalence of the Hessian fly some twenty years ago, the farmers found great protection in the practice of seeding late; few of them would risk their seed in the ground before the last of October. This custom prevailed until the Mediterranean wheat was introduced, about the year 1841; it had the reputation of withstanding the attacks of the fly, and as an early variety escaped the rust, it certainly did produce more certain and heavier crops for several years, than any other variety grown in this region, and in consequence of its ripening early it is still a favorite with some of our farmers. I will add that the quality of the grain is much improved; but it has ceased to resist the effects of the fly, and indeed, from the straw being naturally weak it is more liable to be injured by this insect than some other varieties, still it might well, if other importations could be made at this time, to renew the original qualities of the grain.*

The question now is, whether we shall return again to the practice of late seeding. It is true the fly has destroyed some of the late as well as early sown wheat the present season, but there are other remarkable instances, where the seeding was late, upon corn ground, and the wheat has escaped. Wherever the practice of late seeding is adopted, the earliest varieties of wheat should be used. It would be well if a number of farmers in the same district, would appoint the same time to seed their crops, either *early* or *late*, we then may be able to judge whether the time of seeding has the effect which has been attributed to it; but if some seed their grain early, and others near by sow late, these light-winged insects may be easily conveyed from field to field by a favorable wind and all will be liable to fare alike.

For some years past wheat has been considered one of our most certain and profitable crops; heavy outlays for guano and other fertilizers have been made to apply to it, and the return from these manures and a better mode of culture has hitherto been highly remunerative. Anything therefore approaching a general failure of this crop, is well calculated to cause serious apprehensions in this community, as well as in other States where its production is a matter of the first importance, and it is really incumbent upon the Agricultural Societies of the wheat growing States, to aid in their investigations those who have made the habits of insects injurious to the grain crops, their study, and more especially on occasions like the present, when it would add so materially to the prosperity of farmers and the wealth of the State, to discover some means by which the ravages of this destructive pest can be prevented.

* We recently caused to be imported as beautiful and heavy a lot of Mediterranean wheat, as was ever seen, and advertised it with the expectation that it would be readily engaged,—offering it as we did at cost and expenses,—but found a difficulty in obtaining orders for the lot, small as it was, and difficult to obtain, as the merchant who imported it, informed us that the exportation of it was prohibited from the port from whence he brought it. It is, however, disposed of, and those who obtained lots of it, may well congratulate themselves on their foresight in securing some of it. Capt. J. Parrott, of Talbot, to whom we sent some of it, says: "This wheat (Mediterranean) is nearly extinct in this part of the country: I am greatly pleased at getting so pure an article, and think you merit the thanks of the farmers for importing it."—ED. AM. FAR.

On motion of Mr. T. B. Coursey, the above highly interesting paper was ordered to be published in the proceedings of this meeting, with the request that all the papers of the State copy.

After an interesting conversation on the relative merits of different concentrated fertilizers; and the distribution of wheat and turnip seed, received by the Recording Secretary from the Patent Office,

On motion, the Society adjourned.

G. W. S. NICHOLSON,
Recording Secretary.

[From the National Intelligencer, July 27.]
THE HISTORY AND HABITS OF THE ARMY WORM.

A friend who has made entomology a subject of study, furnishes us with some of the results of his investigations into the character, habits and history of the army worm, of which so many complaints have arisen in various parts of the country. The oat patch west of the Smithsonian grounds supplied him with specimens and an opportunity to observe much concerning these devouring pests. Our friend's first impression, and which indeed he retains, was, that the worm in question is identical with the grass worm of the South. Present appearances all attest this identity, but it will require the complete round of transformations to be gone through with before it can be considered certain.

This worm destroys corn, clover, grain, and every kind of grass, and in the South is found very abundant on the grass, and weeds between the rows of cotton. Its caterpillar, just before changing into the chrysalis, hides under stones, and where the ground is broken under clods of dirt. Their enemies are formidable, the largest being the toad, which stuffs itself with them almost to bursting.—The stomach of a toad taken in the oat patch above referred to, having been cut open, was filled with these worms, mixed with a few wings of beetles. The army worm has another enemy in the black larva of what seems to be a *necrophorous*, which preys upon the caterpillar. Besides these there is a small ichneumon, or at all events a parasitical fly, which deposits its eggs all over the back of the caterpillar, and they, when matured, spin cocoons, which send forth a cloud of other flies to repeat the process.

Specimens of the army worm sent hither from Maryland were entirely destroyed by a fly much like the common house fly, but with a lighter colored series of rings around the abdomen, which is hirsute and tipped with brown belonging to the family of *mussaide*. It is a merciful provision of nature that, as these worms increase, so do the parasitical foes which feed upon and destroy them. But for this the consequences would be terrible indeed to all the hopes of the agriculturist.

"It is a fact indisputably proved," says Mr. Cuthbert W. Johnson, "that if sheep are allowed free access to salt, they will never be subject to the disease called the Rot. Some recent experiments also lead me even to hope that I shall one day or other be able to prove it to be a cure for this devastating disease. I have room but for one fact: Mr. Rusher, of Stanley, in Gloucestershire, in the autumn of 1828, purchased for a mere trifle 20 sheep, *decidedly rotten*, and gave each of them for some weeks, 1 oz. of salt every morning; two only died during the winter; the surviving eighteen were ewed, and have now, says my informant, lambs by their sides."

ANALYTIC CHEMISTS OF GERMANY.

Analytic Chemistry has become so important and indispensable to agriculture, that we give place to the following extract from a recent publication, with confidence that its contents will prove interesting to many of our readers as giving information valuable to our young countrymen in search of instruction in Chemical science:

"The German Laboratories offer, certainly, very superior advantages to all who choose to be diligent; and one can say with profit at almost any of them; but it is best for the student to spend some time at more than one. As it is a feature of German character to investigate particular branches, so the different laboratories vary according to the *forte* of their professor.

For *Analytic Inorganic Chemistry*, the laboratory of Rose, of Berlin, has the highest reputation, but then he takes but one or two students, and these places are generally engaged beforehand. They have been filled by American students for some time.

For *Analytic Organic Chemistry*, of course Liebig's laboratory in Munich, stands the highest. He takes about six students, and his laboratory arrangements are fine. It is not easy to get a place there, but an American generally succeeds. His charges are (I think) 64 florins, (\$24) per half year, and 20 florins (\$8) more for his lectures.

For various kinds of *Mineral Analysis*, as that of the silicates, for all kinds of gas determinations, and for general Chemistry, the laboratory in Heidelberg, under Prof. Bunsen, stands decidedly at the head.

Prof. Bunsen is the best gas analyst in the world, and his lectures on general chemistry are said to be as good as any delivered in Germany. The Professor is a most capital fellow. The laboratory is new and the best in Germany. It accommodates fifty students, and has been filled for the last year, but Americans can easily get places. Charges, 46 florins (\$18 40) for laboratory, and 20 florins (\$8) for lectures.

For making chemical preparations, and the general study of organic chemistry, Prof. Wohler, of Gottingen, is, perhaps the best. More Americans study with him than at any other laboratory in Europe, and I have heard him praised by all; but his laboratory is not as well arranged as some others. It is no place to study inorganic chemical analysis.

For beginners, and those at work on qualitative analysis, the laboratory of Prof. Fressenius, at Weisbaden is very good, although for advanced students it is inferior to either of the two mentioned before it—Bunsen's and Wohler's. I have known some who have studied there, and they were pleased. I visited it but a few days ago. The arrangements are very good; charges were about the same as those at Heidelberg, I think, but cannot speak positively.

The laboratory of Prof. Erdman, in Leipsic, is a very good one, and I know several Americans who have studied there. They were pleased, on the whole, but still hardly recommended the place; charges less than those mentioned; many lectures are free.

These are the principal German laboratories, and for most purposes I would decidedly recommend those of Bunsen and Wohler as standing at

the head, giving Bunsen the preference, as I think him the most philosophical chemist of the day.

As near as I can ascertain, the laboratories of Paris are not as good for work as those of Germany, but one may hear good lectures in the winter. I forgot to say that Bunsen's lectures are on General Inorganic Chemistry, there being two similar courses each year. Liebig's lectures are on Inorganic in Winter and Organic Chemistry in Summer. At all of these Universities there are various courses on technical, applied, and special Chemistry, by various professors, which are accessible.

There are some five or six professors of Chemistry in the Heidelberg University, and four working laboratories.

In German Universities there are two terms per year (called semesters)—one commencing about the middle of October, and lasting until March 15; the next commencing about May 15, and ending on August 15. Chemical, as well as other students must be matriculated in the University, which costs various prices in various Universities. Here it is about \$4.40 (11 florins.) Living expenses are rather less than in cities of corresponding size in America; and are, of course, modified by the wants and funds of the individual. A student can live for \$400 per year, expenses all in; can live easily, if economical, and buy some books, for \$500; while many spend nearly twice that. The matter of books and apparatus is an important item, and both are cheaper than in America. Both must be furnished by the student himself; the laboratory furnishes nothing but the commonest articles.

It is well to learn something of the language before coming here; but one acquires it faster here than at home. All the principal German Chemists speak English and French, and one can pick up enough of the German language in a few months to understand lectures, although it takes at least a year to become familiar enough to work well. The best time for entering the laboratories is with the winter half year, or 15th of October, but one can enter at any time."

WHEAT IN WESTERN NEW YORK.

The Rochester Rural New Yorker, in a recent No. of that Journal, says:—

The culture of winter wheat has to a large extent been abandoned in western New York, and in many instances to the profit of the farmer. If, for instance, it has been pursued upon a poor soil—one worn by long culture of this grain, perhaps,—or by methods of husbandry unsuited to its wants and but partially developing its productive capacity, it has been followed without profit, and may be well laid aside for other branches of agricultural production. Cropping with wheat regardless of the character of the soil, regardless of the changes of seasons which seem to have taken place, and above all regardless of the character and habits of the new and potent insect enemy it must now contend with, has resulted in the loss of millions to the farmers of western New York. Yet with proper attention to these influences, we would still advocate a share of attention to this late great staple of this section of the country."

"The alleged cause of the failure of the wheat crop, and its consequent abandonment, is the wheat midge, and its ravages have been truly appalling. But many serious failures occurred before this injury became general, or was considered of much

account—failures from *poverty of soil* caused by wheat after wheat, etc.—from *lack of drainage* and consequent winter-killing and rust,—from *late sowing* on imperfectly prepared ground, also inducing blight and rust, and from *poor management* generally. All these causes prepare the wheat plant for the attacks of the midge, and it will generally be found that the poorer and later the wheat, the less there is left by the weevil to reward the labor of the farmer; while the best wheat, the *brightest, earliest and heaviest growth*, though injured to some extent, still yields a fair product, and pays at present prices a good profit.

"The average injury by the midge in many instances known to us, has been from five to seven bushels per acre—the lighter and later the wheat, the greater the comparative loss. A light yield, say ten bushels per acre, will be one half or more destroyed—good crop of twenty-five or thirty bushels per acre, will seem comparatively uninjured, though one-sixth of it has gone to feed the insect. Hence the importance of securing a good growth, for a light one fails to repay the labor of its production. Hence we advise the sowing of only such soils as are in fertility and characteristics suited to the crop, and of sowing these early to vigorous and early maturing varieties. Let our farmers again select such soils and situations, and sow wheat again, but only so much as they can put in in the best order on a rich, warm, porous soil, and we think they will not long have occasion to buy flour or use so largely of other grains as many are now obliged to do.

"We throw off these thoughts, hastily, for the better consideration of our readers. Let the matter be discussed if need be; for ourself we shall have acted upon these views, and find them safe for that purpose. By not heeding them, we have failed in growing good wheat on any soils unsuited to it, or which from want of drainage, retarded its ripening, however early the sowing or the variety of seed."

MOLASSES AND SUGAR FROM THE CHINESE SUGAR CANE.

In our last volume we published various particulars in regard to the cultivation of the sugar cane, and would now particularly refer to the statement of Gov. Hammond, of S. C., on page 196, of Jan. No. of vol. 12, American Farmer, for the manner of Harvesting the cane, and making syrup, &c.—and also to the following extract from Dr. R. Battey, Chemist Philadelphia:

"HARVESTING.—When the stalk shall have attained its full size, and the seed have passed from the dough stage to a harder texture, the cane may be considered sufficiently mature. Or if the crop be large, and a deficiency of hands be apprehended, the cane may be cut earlier, and the cuttings continued from time to time, as needed for the press. The fodder should be pulled as for corn; another set of hands cutting off one-half to two feet of the top with the seed, while others cut the cane at the ground and throw it into piles, from whence it is hauled to the press.

"Prior to the harvesting, a set of proper rollers and kettles should be provided and well set up, ready for service. The mill made use of by Mr. Peters, [see American Farmer, vol. 12, page 158] and which was gotten up under his direction for the purpose, is, in my opinion, of very unexceptionable

quality for a small apparatus, and works admirably. It is of a suitable size for a small crop, and no farmer should undertake to supply its place by wooden rollers, for a crop of even two acres. The loss of juice will more than counterbalance the difference in expense. It is worked by two mules. Three kettles, of from 60 to 100 gallons capacity, will be required to keep pace fully with the mill. It is desirable that these should be broad and shallow, that they may present a large evaporating surface, and substantially set in brick for security and convenience. They should not be distant from the press, and if upon ground lower than the latter, an advantage is gained in running the expressed juice directly into them, and thus saving the labor of transfer.

"PRESSING.—The canes, located conveniently at hand, are one by one doubled in the middle and forced between the rollers, which are kept in as close proximity as the strength of the mill and the power of the mules will warrant. An active hand will feed the mill easily, if the canes be placed within his reach. A boy is required to drive, and if the mill be well constructed to throw off the bogasse from behind, nothing more is required, except an occasional removal of the latter by a pitchfork, to keep it out of the way of the mules.

"BOILING DOWN.—One of the first things done in commencing operations should be to start the fire under the kettles, that they may be well warmed by the time the juice is ready for them. The fires should be so arranged that they may be under good control, to be forced or withdrawn as occasion may require. When the juice is placed in the boiler, the fire should be gradually increased to a simmering heat, (not to active boiling,) and maintained at this temperature, until a thick green scum rises to the surface and forms into puffs, seeming ready to crack. This scum, when fully formed, should be removed clean from the surface. The heat may now be raised to boiling, and kept in an active state of ebullition, until the bulk is reduced one-half. The fire may now be removed from one kettle, and its contents be transferred to the other, when the heat must be gradually moderated as the syrup becomes more concentrated, to avoid the danger of scorching, which injures the color and flavor. Should more dirty green scum rise to the surface, after the first skimming, it should likewise be removed.

"In regard to the precise degree of concentration to which the syrup should be brought, it is exceedingly difficult to lay down any precise and simple rule which shall meet every case. The plan for determining it, in use on the sugar plantations, and which was adopted by Gov. Hammond and Mr. Peters, is based upon the judgment of the eye, in respect to the consistence of the syrup when poured from the ladle, and cooled as it drops from its edge."

For the want of a better, a cider mill can be used to press the juice.

The St. Louis (Mo.) Ag. and Mech. Fair commences 28th Sept. and continues 6 days—\$16,000 are offered in premiums.

Maryland State Agricultural Society.

A quarterly meeting of the Executive Committee of the Md. State Agricultural Society, will be held at the Society's Room, in Baltimore, on Tuesday, 1st September, at 9 o'clock, A. M. A punctual attendance is requested, as business of importance will require the attention of the Committee.

By order of Ramsay M'Henry, Esq., Pres't,
Sept. 1-1 SAML. SANDS, GEN. Sec.

MARYLAND STATE AG. SOCIETY'S EXHIBITION THIS FALL.

We are enabled to announce, that the sum of \$10,000, required by the Executive Committee of the Md. State Agricultural Soc. to be guaranteed or subscribed to secure the Society from loss, in the Exhibition proposed to be held this Fall, has been so far obtained as to warrant us in saying that the Exhibition will certainly be held at the appointed time, the 20th to 24th October.

 Dr. J. H. Thomas and Wm. C. Wilson, Esq., have been appointed delegates on the part of the Md. State Agricultural Society, to the U. S. Agricultural Society's Exhibition, to commence 1st Sept. at Louisville, Ky.

MEDITERRANEAN WHEAT, IMPORTED.—In a note on another page, it is stated that the lot of imported Mediterranean wheat had been all sold.—We supposed, at the time, that it had been all engaged, but it appears there were more in the lot than was estimated, and some 10 or 12 bushels are, at this writing, still on sale, at \$4 per bushel, bags and drayage extra.

HOOPER'S WESTERN FRUIT BOOK.

Is the title of a work received from the publishers, Moore, Wilstach, Keys & Co., of Cincinnati. Its design is to give a catalogue of the fruits of all kinds grown in the west, of known and well tested character, their correct nomenclature and synonyms, with a brief though sufficient description of their qualities, their productiveness, fitness for market-growing or family use, the kind of soil best suited to them, &c. The design so far as we can judge is well executed, and the book we think will be a most useful guide to the beginner in fruit culture, and will be valuable to all. Though a western book, the information it contains will be available to the intelligent reader in all parts of the country.

Annexed to the work are drawings and descriptions of the Summer Fruit and Ice House, patented by John C. Schooley, of Cincinnati, and promising to be a most valuable agent in the preservation of fruit, &c.

Russel's Magazine, a monthly organ of Literature and Criticism, is the title of a new monthly, published at Charleston, S. C., of which we have received the first No. It is designed to "give utterance and circulation to the opinions, doctrines and arguments of the educated mind of the South especially, and to promote in its sphere and measure, the progress of a sound American Literature." We wish it all the success, which we judge from this number it will eminently deserve.

BONES AND MANURE.

The value of bones to the farmer, is admitted by all; and the improved condition of the Agriculture of England, dates from the introduction of their use, in connexion with the turnip culture. The great difficulty is in obtaining a supply, and a further one, of preparing them for the soil. Various suggestions have been made, to effect this latter object, which we have published from time to time, and now add another from the N. Jersey Farmer, which has the recommendation at least of simplicity:

"Last fall a lot of bones were thrown in a heap of horse manure in the barn-yard, and for no other purpose than to get them out of sight. To this heap the manure of the horse stable was daily added. In the spring, upon carting out the manure, the bones were found apparently the same as when thrown in—whole and sound; but upon being handled, were found to be soft; when lifted would fall to pieces of their own weight; when exposed to the air would crumble and become as ashes, emitting a strong and offensive odor. This incident led to a trial of the same experiment last Spring, in the same manner, and with the same result.

"We do not pretend to fix the chemical process by which this result is attained; we merely know that such is the result. And if a result so happy in its effects is produced at so little trouble, and with such little cost, our farmers may well spare an odd day in gathering together the old bones lying about their farms, and for the mere trouble of gathering them, add to their lands one of the most fertilizing materials that can be obtained.

"Let our readers avail themselves of this suggestion, and in preparing their manure heap for the winter, have collected together a pile of old bones, and let them be scattered through your heaps where you throw your horse manure, and you will find when the manure is carted out in the Spring, in place of old bones, a manufactured A. No. 1. Bone Dust."

W. S. Henerey & Co., of Charleston, S. C., are preparing a Sugar Mill for Chinese Cane.

THE GRAPE CULTURE.

The following extract is from an address delivered by Dr. Underhill, some years ago, which we commend to the attention of those intending to cultivate this delicious fruit:—

The grape is most delicious, most salutary—diluting the blood and causing it to flow easily through the veins; there is nothing equal to it for old age.—In this country its use will grow—will increase till its consumption is prodigious. It will supplant some of the articles which destroy men, and establish the cheerful body in place of the diseased system of the intemperate. No disease of the liver—no dyspepsia are found among those who freely use the grape. This remarkable fact is stated in reference to the vineyard portion of France. Persons who are sickly in grape countries are made well when grapes are ripe. And the result is familiarly called the grape cure! In this country our attention has been long misdirected. We have spent years

and sums of money on imported vines. We have proved the fallacy of all this. The foreign grape vine will not flourish in our open air. I suppose that millions of dollars have been lost on these foreign vines during the past century. Climate has settled that question. Our extremes of cold and heat are incompatible with the character of the foreign vine. Time will show that our native stock of grapes will, by cultivation, gradually improve in quality. It is with them as it is with animals, great amelioration follows care and proper knowledge.—I spent some thousands of dollars on the foreign grape vines without success. We want to supply our twenty millions of people with fine grapes! In 1830 France produced fourteen thousand million pounds of grapes! Of which were consumed on the tables, and exported in the forms of raisins, &c., two thousand million pounds! Are you afraid that our market will be overstocked from the few vineyards which we have?

There are many books on the culture of the vine, but their doctrines are generally not at all applicable to our country. Europe has the moisture from the ocean, we have the dry winds blowing over our own continent. More heat penetrates our ground in one of our hot bright days, than England has in a week. The books of Europe are an honor and an ornament to the world, but they lead us from the truth frequently; such is the great difference of the climates of Europe and America. We must here select our best native grapes; there are many, of which we have now proved the Isabella and Catawba to be excellent. Plant vines on deep dry soils where there are no springs of water—on stony, calcareous, or other soils, but the dryer they are the better for the grape. A soil of brick clay will not do. The roots must be deep to avoid our severe drouths. Plough the ground exceedingly deep before you plant your vine-yard. I have found that in seven years culture the savage part of my Isabella has vanished. Its character is greatly changed for the better. Its pulp is almost gone; its seeds are less.

The culture of the vine has one great and eminent advantage over all other crops. If you plant it well, you will get an increasing crop for twenty-five years; and every year, (with rare exceptions,) for fifty and seventy-five years, a good crop: vines will sometimes live a hundred years; and from our native vines you can have double the quantity which is obtained from a vine in Europe, where the vine has from ages of short pruning become and feeble attained its perfection. We do not let the vine bear one-half as many grapes as they would if all were left on. Thin them out well. You will have better and richer fruit.

In pruning I do not spur them. I cut away the old, and bring the new vine to bear. Nineteen out of twenty persons spur prune their vines in this city leaving two eyes on.

I keep my vines about six feet in height for convenience in gathering the clusters. All kinds of animal substances are good for our vines. Street manure is excellent for them. They ought not, however, to be stimulated too highly, for then they become profuse in foliage, and the fruit mildews and rots. An even regular growth ought to be kept up. Rotten sods mixed with barn-yard manure is good for vines. Blood is good. Long Island might, by means of the fish called Manhaden, be made one beautiful vineyard. Take the fish in

June, make a hole near the foot with a crowbar, push down a fish—there will be no smell from it, and it is an admirable manure for grapes.

Composts of sea weed, black earth, and cow and horse dung are good.

Ashes are excellent on sandy lands where their phosphates are leached off by rains.

Prune in March; they bleed, and my bleeding vines present a magnificent spectacle in the rays of the sun. Slight bleeding does not hurt them a bit. The bud starts the better for it. The Germans say "if the juice runs out of the vines, we know we shall have a good crop." In France and Italy, however, they do not prune so as to bleed their vines.

NEW ADVERTISEMENTS.

This is the season for procuring supplies of Machinery, Fertilizers, Seed, Trees, Shrubbery, &c., for the Fall, consequently our advertising friends have availed largely of our pages this month, to make known their readiness to supply the expected demand—and as it is the "early bird that catches the worm," so first applicants will be most likely to receive the best choice of the various commodities offered. And here again we would repeat our earnest advice to every landholder, who has even a rod of ground, to obtain and plant out fruit or ornamental trees, shrubbery, plants, vines, &c., of some kind or other, and our word for it they will not only add to the comfort and happiness of the home circle, and endear the homestead to their children for all time to come, but its adornment, in case necessity from any cause may require its sale, will be found to add largely to its selling price. We speak from observation and experience.

Among the well-established NURSERYMEN whose advertisements will be found in the Farmer, (in addition to those noticed last month, and continued this,) are those of

J. M. Thorburn & Co., 15 John St., New York.
Thorp, Smith & Hanchett, Syracuse, N. Y.
H. A. Mish, Harrisburg, Pa.
Stephen Hoyt & Co., New Canaan, Ct.
J. L. Darlington & Co., West Chester, Pa.
H. R. Robey, Fredericksburg, Va.
Wm. R. Prince & Co., Flushing, N. Y.
Jno. Saul, Washington City, D. C.
David J. Griscomb, Evergreen Nursery, Woodbury, N. J.

Geo. W. Wilson, Malden, Mass.
R. T. Underhill, Croton Point, N. Y., Grapes Vines, &c.

IN THE IMPLEMENT AND MACHINERY LINE,
Our city manufacturers, the old established houses of R. Sinclair & Co., and E. Whitman & Co., offer a larger variety as usual, as shown in their numerous advertisements. In addition to which—Thos. Norris, Light Street, Baltimore, offers a very general variety, and he, and C. F. Corser, Baltimore, are agents for Bickford and Huffman's Drill. Page & Co., their inimitable Saw Mills, Horse Powers, Crushers, &c. Montgomery & Bro., Baltimore, their celebrated Rockaway Fan. Saml. Cottingham, Baltimore, Ploughs, Cultivators, Harrows, Powers, and all other kinds of

Agricultural Machinery. Rogers & Boyer, Philadelphia, Horse Powers, and all other Machinery and implements used by the farmer. Jas. A. McPherson, Alexandria, Woodbury's Separator and Cleaner, Horse Powers, &c. W. O. Hickok, Harrisburg, Pa., Cider Mill, &c.; he also offers a reward for a horse stolen; the thief, it is supposed has made for this State. W. W. Dingee & Co., York, Pa., an improved hand power Hay Press.

J. A. Weston & Co., Baltimore, Ingersoll's improved Hay Press, and Fairbanks' Cattle and other Scales.

Among the new advertisements of *Fertilizers*, is one of Wm. Robinson, Baltimore, offering all varieties of Guanos, Super-phosphates, &c. Advertisements of numerous other dealers will also be found in our pages, and heretofore noticed. J. J. & F. Turner, present a vast additional amount of testimony from well known agriculturists in favor of De Burg's. Jno. S. Reese & Co., renew their claims for the Manipulated Guano, and notice a change in price. African and other guanoses are offered at the Farmer Office.

MISCELLANEOUS.

W. E. Broderick, Baltimore, offers Singer's Sewing Machines, by which, he says, an industrious woman can earn \$1000 a year; we hope that he may be able fully to verify this promise, for if he does, he will be the greatest benefactor of this or any other age.

Drumquastle, a beautifully located country seat, near this city, will be offered at public sale on the 8th September, at the Exchange—a more desirable situation for a country seat for a gentleman can scarcely be found near this city—we would like to have the means to purchase it.

Hy. Massie, of Culpepper Co., Va., offers a farm, if taken in September, which is represented as a fine opportunity for a Physician.

N. B. Worthington, Baltimore, also offers a tobacco farm, near Annapolis, and within 2 hours ride by Rail Road of Washington and Baltimore cities—it is believed to be an admiral location for a truck farm.

We call attention to a number of advertisements of land for sale in various States, mostly in Virginia,—a great bargain we are assured will be found in that offered in Gloucester Co. by the publishers of the Farmer.

C. M. Saxton & Co., New York, the American Farmer's Encyclopedia, a work which (next to the "American Farmer," of course,) is the best work for the farmer ever published—no agriculturist should be without it in his library.

John S. Foust, Glen Rock, York Co., Pa., offers a young Stallion.

Francis H. Smith, Baltimore, offers small sizes of his Brick Maker, by which a farmer can make his own brick.

Royston, Brothers, Baltimore, offer a large stock of Dry Goods, of every description, including heavy goods for farm hands. Jno. T. Watkins, Baltimore, manufacturer of Cabinet Furniture, can fit out new establishments in house-keeping, or replenish old ones—give him a call.

"A deplorable disease and its remedy," being a description of the Cancer, will be read with interest by the afflicted or their friends.

John R. Richardson, of Wythe Co., Va., will have a public sale of Durham stock at the Cattle

Show at that place on the 13th and 14th October next; Col. Matthews' endorsement of the stock is a sure guarantee of its genuiness.

T. T. Nelson, Baltimore Co., it will be seen will offer his fine "Vermont" and other horses for sale at our Sale Show, if not disposed of before then.

Bibb & Co., Baltimore, at their Stove Warehouse, are prepared to supply all kinds of fixtures for the fire, including Ranges, Hot air furnaces, Stoves &c., of which they keep a large stock.

BALTIMORE MARKET—Aug. 29.

The offerings of Wheat continue very large in our market, which of course has a tendency to depress prices, more especially as the greater portion of it is in bad order. We have never known a season in which so much wheat has been injured, as the present. Yesterday, the offering at the corn Exchange amounted to 75,000 bushels, the largest of the season, and though the inquiry was quite active, the decline, says the "American," was not as great as was anticipated at the opening of change, owing probably to the news by the steamer announced in the morning, of the upward tendency of breadstuffs in England—the average decline was about 5 cts., although on some of the lower grades the decline was much greater. Though the warm Wheats sold to-day at 100 to 125 cts., and dry lots sold at 120a130 cts. for fair to good reds, 135 cts. for prime Zimmerman do., 130a145 cts. for fair to prime whites, and choice parcels do. brought 150, 155a160 cts. That sold at the latter figure was perfectly dry and of very superior quality. Corn was decidedly lower. There were some 15,000 bushels at market and a part of it was sold at 77a78 cts. for mixed, 80a82 cts. for white, and 82a84 cts. for yellow. We hear that since Change fair white or mixed Corn had been offered at 75 cts., without being taken. Rye continues in light supply.

To-day, 28th, prices range as follows:—Red Wheat sold at 110a125 c. for lots out of order, and 130a135 c. for good to prime; whites sold at 130a150 c. for fair to prime, 160 c. for choice family flour parcels, and 120a130 for tough lots. Corn, receipts fair, and market active, white 80a82 c. for good to prime; yellow, 82a84 c. for fair to prime, and 78 c. for mixed. Oats, in fair request, at 40a42; Md. and Va. 38a39. Rye, Md. 90, Pa. 100 c. Guano, Peruvian, 65a68 per ton of 2340 lbs.; Colombian \$40; Mexican AA. \$25a26—inferior brands less. African \$33a35 per 2,000 lbs. Hay, baled \$16a18, loose \$12a15. Straw, rye 15a16, wheat \$10a11. Wool, firmer, unwashed 23a24 c., tub washed 33a37, pulled 30a32, lambs 31a33, quarter to full Merino, 33a47 c.

Tobacco, Md. is in brisk demand, at an advanced within the week—Maryland Brown Leaf at \$9a10, as to quality: inferior short seconds \$7.50a8.50; Brown Leafy \$10a11, and Extra at \$11a15. Bay Tobacco still comes in slowly, and prices have rather a drooping tendency—Tips at \$9a11; Seconds \$12a15; Yellow Spangled \$30a35, and Fine Yellow \$35a45. Ohio Tobacco, inferior to good common brown at \$8.50a9.50; middling to good reds \$10a12; good to fine reds and spangled \$11a16; good to fine yellow \$17a30; and some sold as high as \$35. fine red cigar wrappers may be quoted at \$14a18.

Flour, Howard st. \$6 25; Ohio \$6 12; City Mills \$6—extra City Mills \$6 75a725, do Ohio and Howard st. \$7a 7.25. Clover Seed \$7.75a8 per bushel,

Timothy \$44.25. Whiskey, Ohio 28a28½ c., and city 27a28. Rice dull, at 5a5½ c. for good to prime lots. In Sugars and Molasses the market is decidedly heavy, with a declining tendency.

CATTLE—sales show an improvement within the week; 925 head were offered last week at the cattle scales, 230 of which went to Philadelphia, 25 were left over, unsold, and the balance, 670 head, were sold to Baltimore butchers at \$4 to \$5 on the hoof, equal to \$8 a \$9, and average \$4.56 gross—some small lots very fine, brought \$5.12 on the hoof. Hogs, scarce and in demand, prices ranging from \$9 a 9½ per 100 lbs. net—Sheep are selling at \$3 to 4½ per 100 lbs.—Lamb \$2.25 a 2.75 per head.

From Europe—The steamer America has just arrived, with Liverpool dates to Aug. 14. The very latest intelligence by her, is to the effect, that “Cotton closes generally with an advancing tendency”—and “Breadstuffs close buoyant.” The trade at Manchester was favorable, and the latest news from India was considered favorable, though nothing decisive had transpired, which had a good effect on the money market.

The breadstuffs had advanced, which is said, in Richardson's circular, to have been caused by heavy rains in the interior of England. Barings' circular also says that “Wheat closed with an advancing tendency—flour is steady.” Other letters report, “that unfavorable weather for harvest had stiffened prices, and Flour had advanced 6d per bbl. Wheat had also advanced. Corn remained unchanged.” At Havre, (France) breadstuffs are quiet but steady; but it is added, that in other parts of France they have a declining tendency.

A DEPLORABLE DISEASE AND ITS REMEDY.

Perhaps in all the annals of medical history, no disease has so completely baffled the skill of the physician as Cancer. It is singular and mysterious in its character, uncertain in its origin and unrelenting in its progress. Hitherto it has been deemed incurable except by a surgical operation of the most painful and dangerous nature, and which, when resorted to, was very rarely indeed permanently successful. The name of this malady is derived from the Latin; the word “cancer” signifying a crab, and it was so called from the fancied resemblance of its roots to the protruding claws of that creature. There is, indeed, a certain kind of propriety in giving the name of an animal to this disease, which, though not having a separate, has yet an independent existence, and feeds and grows like a fungus in the parts to which it is attached, having as it were a species of vitality independent of the system in which it is lodged. It is this peculiarity which gives to cancer its dreadful and incurable character, and places it beyond the reach or control of any ordinary treatment, and it is this independent organization as it were, which has driven the faculty to the caustic and the knife, to cutting out and burning the parts for the purpose of its extirpation. Fortunately for mankind this horrible disease cannot be communicated from one person to another, and is isolated in its character. If it were otherwise it would be dreadful indeed, for a more painful and loathsome death than that by cancer, is perhaps unknown.

There are various kinds of cancer, presenting

very singular varieties of the disease, and known by different names, although in essential character they are the same. Cancer is commonly, however, designated as scirrhus or undeveloped cancer, and open cancer. The first term is applied to it before ulceration has taken place, but they are both the same identical disease in different stages. The origin, of course, is unknown; it is sometimes a local, sometimes an hereditary, sometimes a constitutional, and sometimes an occasional disease. It frequently exists in a latent or incipient state for years before the evident symptoms of the affection manifest themselves, and the exciting causes of its appearance may seemingly be slight and trivial; a bruise, a wound, a wart, a crack or fissure in the skin, or even a common sore may excite cancerous developments; thus a sunburn on the lip has been known to result in cancer. Persons between the ages of forty and fifty are more liable than others to be attacked with cancer, and men who lead indolent and sedentary lives, maids and widows, are more frequently its victims than others. Women are also more subject to the disease than men. The first appearance of cancer is invariably in the shape of a hard tumor, perhaps unnoticed until it reaches the size of a chestnut, and for a long time it may seem to be stationary, giving no pain or inconvenience, and not occasioning in the unconscious victim the slightest uneasiness. It, however, after a while begins to extend itself, and pushes out its numerous roots or limbs, by which it draws nourishment from the surrounding parts.

The patient now becomes aware that all is not right. Sharp lancinating pains shoot from the part affected, great heat and gnawing burning pains are also felt. The color of the skin begins to change, first showing a red, then a purple, then a blue or livid appearance. The tumor itself becomes hard, rough and unequal, with a slight protuberance in the centre. Its size increases daily, and the neighboring veins become thick and knotted, and sometimes of a blackish hue. When these symptoms all present themselves, they show the cancer to be of the most virulent description. The patient lingers on from day to day, in increased pain and suffering. After a while the skin gives way and a thin discharge flows forth, corroding the parts until it forms a hideous and unsightly ulcer. The smell of the discharge is extremely fetid. The pain and stench finally becomes intolerable, nature is at length exhausted by the perpetual drain from the sore, hectic fever sets in, and discharges of blood, with faintings or convulsive fits generally precede the moment of final dissolution. There are, however, variations in the course of the disease, according to various constitutions, and the parts affected by the malady. Cancer generally attacks the glandular portions of the human frame, but is not confined to them. No portion of the body is entirely exempt from it, though some organs are more liable to it than others. In women it most frequently attacks the breast. A false modesty often induces females to conceal the affection of these parts, as long as concealment is possible, when it is only before the cancer is fully formed, and while it is yet in the shape of an incipient tumor, that it can be removed by any of the usual forms of medical treatment, which by restoring a general healthy tone to the system, and promoting through topical applications the absorption of the tumor before it grows to any extent, sometimes effects this object. The greatest

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vigilance therefore should be practiced to detect the premonitory symptoms of the disease, and which should never be concealed. Small irregular lumps appearing in the breast, though they may be no larger than so many peas, should be regarded with suspicion, even when unaccompanied with pain. When the breast is the seat of Cancer, and the disease draws near the surface, the skin begins to look as if drawn together in folds, and the nipple will perhaps become so sunk as hardly to be seen. As the disease progresses, it extends to the glands of the arm pit, the functions of the lungs are deranged, a difficulty of breathing follows, attended by a cough, the whole constitution becomes tainted, and then usually the afflicted resort to the surgeon and the knife, but it is too late. Extirpation by the knife has never yet been found thoroughly effectual, except in the very early stages of the disease.

In men, the lip, the eye, the nose, the cheek, the glands of the neck, and some other parts are more liable to Cancer. Its commencement is usually in the shape of a slight sore or tumor, or a small wart of a watery appearance, and may be productive of but little or no pain or uneasiness. After awhile, however, burning, gnawing and shooting pains set in, and an open, ulcerating sore succeeds, and rest or sleep becomes a luxury but seldom enjoyed.—When ulceration takes place, it should be attended to without a moment's delay, before any important organ or blood vessel becomes involved. Such are some of the characteristics of cancer, that terrible malady, the very idea of being afflicted with which, blanches the cheek of the sufferer, and seems to shut out all hopes of relief, except in the arms of death. It is almost the only form of disease which has hitherto defied cure, alleviation or relief at the hands of the Medical Faculty.

But can this disease be cured? This is indeed a vital question to all afflicted or threatened with it; we have, however, no hesitation in saying that it can. The remedy exists. Cancer in its most malignant form can be cured, not by cutting out with a knife or burning out with caustic with doubtful and sometimes immediately fatal consequences, but cured by a mild, certain and effectual mode of treatment entirely unknown to any of the medical profession, or to any other person except to its fortunate proprietor and perfector, Mr. John Cathers, of Baltimore.

We speak of what we have seen, and what we know. Convinced that Providence in its goodness provides the means of cure for every disease and remedy for every ill that flesh is heir to, and that men were not doomed to suffer and perish without relief, he discovered during his travels in Europe, and has since perfected a mode of cure alike simple and effectual as it is astonishing, and indeed incredible, to all but ocular demonstration. We have alluded to the separate organization, as it were, of cancer, to its being a species of fungus growing in the human system, and drawing its nourishment therefrom as a plant does from the earth. Upon this fact is founded the principle of the cure. It is a simple application to the parts affected, which destroys the separate life or vitality of the cancer, separates the diseased mass from the sound flesh, and brings it entirely away. The remedy is always uniform and satisfactory in its result, and if the patient be not already at the very gates of death, is certain to bring about not a mere temporary alleviation, but a permanent cure, and that is effected without any cutting or hacking with the knife, or burning or torturing with caustic. It never fails to

extract the cancerous matter from the sound flesh; for while it destroys the morbid organization of life in the cancer it excites a healthy and healing action in the sound parts. In three or four days after the application of the remedy, the sensibility of the parts to pain is destroyed, the morbid vitality of the cancer is killed, and the separation of the diseased parts from the healthy tissues immediately begin to take place. In ten or twelve days a fissure or crack is formed, as a line of demarcation between the sound and diseased parts, this gradually widens day by day, until a total separation ensues, and the whole of the diseased parts fall out, roots, fangs and all. The whole lump or tumor, with its roots, has become by this time so much dead matter, rendered so by the application of this almost miraculous remedy, and is thus thrown off from the system. We venture to say, that no parallel to the astonishing results of this remedy can be found in the whole record of medical science. A simple poultice concludes the cure.

The medical profession, as is well known, have a great antipathy to empirics or quacks, as they call all who cure diseases without a diploma, but after all, it is the cure and not the diploma that the patient wants. Yet to obviate, however, even the effect of this prejudice, Mr. Cathers after having established in numerous instances, with unmistakable certainty, the effectual operation of his cure, began to read medicine regularly with a physician, intending to graduate in the regular manner, when to his astonishment he found he never could receive a regular diploma according to the absurd regulations of our medical colleges, unless he first surrendered the secret of his remedy. A sacrifice he by no means felt inclined to make; for so long as useful discoveries in medicine, unlike those in the arts, are unprotected by the laws, the proprietors and discoverers have no safety, no security for remuneration except in their own secrecy. The secret of his cure is, therefore, most justly retained by Mr. Cathers, in his own hands. It would be asking too much to require him to yield it up without some equivalent, which a diploma to practice medicine can hardly be considered to be. The General Government might offer Mr. Cathers one or even two hundred thousand dollars to make his remedy publicly known. The sum could not be better expended than in purchasing this secret for the benefit of the people. It would be really a most humane and proper expenditure; but unfortunately our General Government is not easily moved in any matter out of which political capital cannot be made. As things were, Mr. Cathers was compelled either to lose the advantage of his mode of cure, or be deprived of a license to practice medicine with impunity. He must properly decide to retain the sole possession of the knowledge of his remedy. It is to be regretted that Mr. Cathers has not made the fact more widely known that he can beyond all doubt effectually cure this deplorable disease. The facts cannot be disputed here in the city of Baltimore; the instances in proof are all about us, but they ought to be known through the length and breadth of the land, that the afflicted may avail themselves of the remedy he possesses. He has, however, hitherto preferred to have the cure make itself known, and establish its own character; and this it has done beyond cavil in every instance in which it has been applied. We should suppose that as our medical colleges refuse Mr. Cathers a license, unless he shall first part with his property, that it would be but an act of justice in our Legislature,

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should he apply to that body, to grant him a special license for the cure of cancer. We think he owes it to himself and to the value of his remedy, at least to make the application.

Sept. 1.

EXTENSIVE SALE OF THOROUGH-BRED CATTLE.

THE SUBSCRIBER HAS THE FOLLOWING FIRST CLASS,
SHORT HORN CATTLE FOR SALE:

BULLS.

- No. 1, *Uncle Sam*, No. 2324 A. H. B., roan, calved 18th July, 1855, got by Orman, 786 A. H. B., dam Ariadne by Norfolk, 755.
- No. 2, *Mill Boy*, No. 1974 A. H. B., white, calved March 16th, 1756, got by Shylock, No. 2200, dam Kate Turley by Ashland (sire of Norfolk) 220.
- No. 3, *Tony Lumpkin*, No. 2303, roan, calved Aug. 6th, 1856, got by Shylock, 2200, dam Ariadne by Norfolk 755.
- No. 4, *Sianhope Burley*, No. 2257, white, calved August, 1857, got by Orman 785, dam Nancy Dawson by Pilot 814.
- No. 5, *Clifton*, roan, calved March 10th, 1857, got by Orman, dam Pansy 6th, by imported 3d Duke of Cambridge, 1034.
- No. 6, *Danton*, roan, calved 13th of April, 1857, got by Orman 785, dam Nightshade, 2nd, by 3d Duke of Cambridge, 1034.
- No. 7, *Darby*, roan, calved March 19th, 1857, got by Orman 785, dam 8th of January, by Norfolk, 755.
- No. 8, *Duroc*, white, calved June 14th, 1857, got Orman 785, dam Ariadne by Norfolk, 755.

COWS.

- No. 9, 8th of January, white, calved Jan. 8th, 1853, got by Norfolk 755, dam Anna by Comet 2nd, 360.
- No. 10, *Ariadne*, white, calved Feb. 21st, 1853, got by Norfolk, 755, dam Moss Rose, by Ashland, 220.
- No. 11, *Tulip*, red and white, calved 22nd Feb. 1853 got by Norfolk, 755, dam Moss Rose, by Ashland 220.
- No. 12, *Moss Rose*, roan, calved, 15th April, 1855, got by Orman 785, dam 8th January, by Norfolk 755.
- No. 13, *Adeline*, white, calved Sept. 15th, 1854, got by Young Paragon 1155, dam by Belvedere, by Franklin (3834) gr. dam by imported Matchem 2283.

For full pedigrees see 2d and 3d vols. of American Herd Book. Clifton, Danton, Darby and Duroc will be recorded in the 4th volume.

The stock of the subscriber is a combination of blood of some of the best prize Cattle of Kentucky and New York, and any person desirous of commencing breeding, or of improving their present Herds, can find no better blood. They will be shown at the Wythe County Agricultural Exhibition on the 13th and 14th October next, and offered for sale to the highest bidder.

TERMS.—For all sums under \$50, cash; over \$50 and under \$100, six months time; over \$100, twelve months.

JOHN R. RICHARDSON.

At the request of Mr. JOHN R. RICHARDSON, of Wythe county, I have examined his stock and their pedigrees. The cattle are good, and their pedigrees unquestionable. Any person buying of him will be sure to get what he bargains for.

sept 1 ALEXANDER S. MATHEWS.

HICKOK CIDER MILL IMPROVED.

Price—The Old Pattern, \$40.00

The Improved Pattern, 43.00

FOR SALE BY

E. WHITMAN & CO.

No. 63 Exchange Place, Baltimore, Md.
sept 1

COTSWOLD SHEEP.

THE subscriber will have for sale, deliverable in August, BUCK AND EWE LAMBS, out of the Cotswold breed by his imported Buck, out of Ewes from the most approved flocks. Also yearling and 2 and 3 year old Bucks and Ewes, of the same stock. Wishing to lessen his flock this season, he will dispose of them on very liberal terms, and invites those wishing to purchase, to visit his farm and examine them. Apply to Messrs. Sands & Worthington, office of the American Farmer, or to WM. JESSOP, Cockeysville, P. O., Balt. Co., Md.

AFRICAN GUANO.

WE HAVE A lot of this guano, with 6 or 7 per cent. ammonium, which is worthy attention. Also Peruvian, Colombian and Mexican Guanos, at lowest prices.

S. SANDS & WORTHINGTON, Farmer Office.

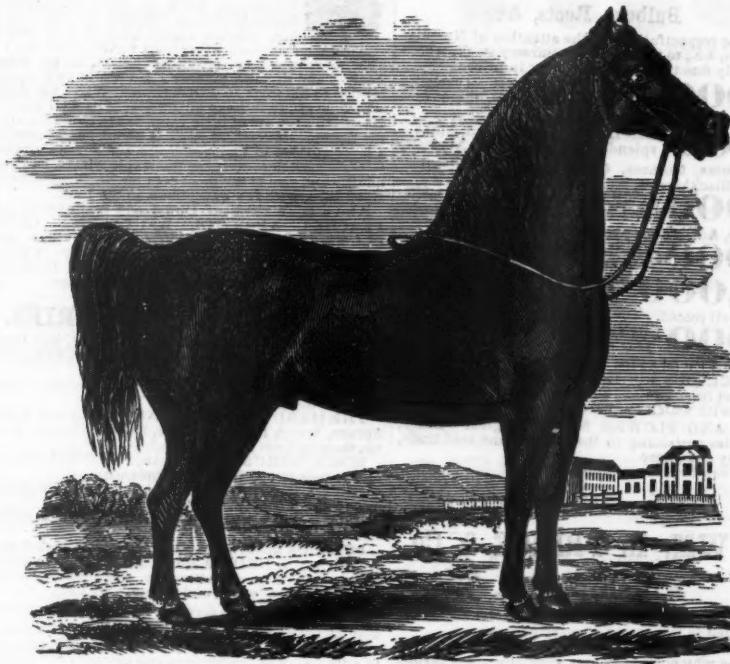
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AGRICULTURAL BOOKS.—A large assortment of Books on Agriculture and kindred subjects, constantly on sale at this office.

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VERMONT, FOR SALE.



The subscriber being desirous of reducing his stock, will offer at public sale, on the last day of the Md. State Agricultural Show, if not disposed of earlier, the following property: VERMONT, sired by Green Mountain Morgan, 16 hands high, weighs 1200 lbs.; color, dark bay; 10 years old last Spring, has trotted in 2.58 and racked in 3 minutes, can show as much natural style as any other horse, and has no superior in the State as a stock horse for all the purposes of life.

Also one Brown Mare, of good stock and size, 6 years old this Spring, good for saddle or harness, with a splendid mare colt by her side, sired by VERMONT. One Chesnut Sorrel Mare, 15½ hands high, 7 years old, northern bred, with a superior horse colt by her side, foaled in August.

Also one Bay Mare, 15½ hands high, 8 years old, of good stock, suitable for farm service and a good trotter, together with one very superior Bay Mare, 15½ hands high; high bred, and a very fast trotter, possessing very beautiful form and proportions, and purchased with especial reference to her qualities as a Brood Mare; 7 years old this spring, and can be recommended as a very superior Mare, both bred to VERMONT this season, and supposed to be in foal.

VERMONT will commence a Fall season at the Smedley Hotel Stables, commencing about the middle of September, and ending at the commencement of the Cattle Show. \$25 The season, or \$20 if paid within the season.

T. T. NELSON,

Towson, Baltimore Co., Md.

sept-

AMERICAN FARMER—ADVERTISER.

SAUL'S NURSERY,

WASHINGTON CITY, D. C.



Fruit Trees, Evergreens, Dutch

Bulbous Roots, &c.

The proprietor respectfully calls the attention of Nurserymen, Planters, &c., to the following nursery stock, which are remarkably fine this season, and low in price:

20,000 DWARF PEARS, choicest varieties native and European, those best suited to the Quince stock—very fine trees.

15,000 PEACH TREES, standard kinds—splendid trees—Apples, Apricots, Cherries, Plums, Quinces, Grape Vines, Strawberries, Raspberries, Blackberries, &c.

20,000 CURRANTS, Red and white Dutch, Red and White Grape, Victoria, Black Naples, &c.—strong plants.

20,000 GOOSEBERRIES—the large English varieties—strong.

500,000 NORWAY SPRUCE, 4 to 6 and 6 to 8 inches, transplanted, stocky and well rooted.

20,000 CHINESE ARBOVITÆ, two year seedlings.

15,000 SILVER MAPLE SEEDLINGS.

DUTCH BULBOUS ROOTS—an extensive collection—received direct from Holland about middle September, and from houses with which I am acquainted.

GARDEN AND FLOWER SEEDS in great variety, with all articles pertaining to the nursery and seed trade, of best quality and cheap.

Catalogues can be had on application.

JOHN SAUL,
Washington City, D. C.

sept-3t



WM. R. PRINCE & Co.

Flushing, N. Y.

OFFER select collections of TREES AND PLANTS, unrivaled in the extent of every department.

The following Descriptive Catalogues, which are sent gratis to those who enclose stamps, comprise every variety worthy of culture, with a *Rejected List* of inferior fruits, many of which are still cultivated elsewhere:

No. 1—FRUIT AND ORNAMENTAL TREES, SHRUBS AND PLANTS.

No. 2—ROSES, CARNATIONS, CHRYSANTHEMUMS, PHLOX, IRIS and other flowering plants.

No. 4—WHOLESALE CATALOGUE, for Nurserymen and Dealers.

No. 6—STRAWBERRIES—descriptions of 105 select varieties.

No. 9—BULBOUS FLOWERS of every class, together with 250 varieties of Peonies, Dahlias, and other plants.

No. 11—Treatise on the CHINESE POTATO, with reduced prices.

All trees and plants will be of the first quality, and at the lowest rates, and will be forwarded, properly packed, to any part of the country.

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MORRIS NURSERIES,
WESTCHESTER, PA.

J. L. DARLINGTON & Co., Proprietors.

THIS ATTENTION of our Southern friends is directed to our very extensive stock of FRUIT and ORNAMENTAL TREES, now on our Nursery grounds, which are unusually fine and thrifty this season; it consists of all the leading varieties of APPLES, PEARS (Standard and Dwarf), CHERRIES (Standard and Dwarf), PLUMS, APRICOTS, NECTARINES, &c., &c.

20,000 PEACH TREES, one year from bud, thrifty and very healthy, warranted true to name.

Also of RASPBERRIES, STRAWBERRIES, RHUBARB, CURRANTS and GOOSEBERRIES, a very large stock—many new and splendid varieties.

Also a large stock of ROSES, Greenhouse and bedding out plants. Catalogues sent to applicants.

sept-1t

HOPEWELL NURSERIES,

FREDERICKSBURG, VA.



THE PROPRIETOR of these nurseries calls the attention of Tree Planters and Venders, to his large stock of FRUIT AND ORNAMENTAL TREES, &c., for Fall planting. Having a large tract of land, (500 acres,) composed of various qualities of soil, he is able to grow every variety of plants, in an unusually healthy and superior manner. He would call especial attention to his stock of SOUTHERN WINTER APPLES, which he grows in large quantities; it is well known that Northern sorts are of little value in the Southern and Middle States. His present stock is about 300,000, embracing a large number of Virginia, North and South Carolina, and Georgia varieties—keeping the whole winter, and equal in quality and size to the most popular Northern sorts, which ripen here, with few exceptions, in the Fall.

Also a large stock of Dwarf and Standard PEARS, PEACHES, APRICOTS, NECTARINES, QUINCES, PLUMS, CHERRIES, GRAPES, &c. &c. The facilities for shipping are equal to any in the country. He has sent trees safely to Oregon.

H. R. ROBEY.

(G—Priced Catalogues sent to all applicants. sept-2t

SYRACUSE NURSERIES.

OUR STOCK for the Fall trade of 1857, will consist of All the LARGER and MINOR FRUITS, in unprecedented numbers;

ORNAMENTAL TREES, in great variety, including many of the finest native Forest Trees;

THE HARDY EVERGREENS, Norway and American, Spruce, Scotch Pine, Hemlock, Balsam Fir, and Arbor Vitæ, ranging from 3 to 6 feet high;

ROSES, SHRUBS, DAHLIAS, PÆONIES, PHLOXES, of rare beauty and in great abundance;

HEDGE PLANTS of Buckthorn, Privet, Osage Orange, and Honey Locust;

ASPARAGUS and RHUBARB, best kinds and strong roots; and of

BULBOUS ROOTS, the usual annual importation.

OF RASPBERRIES AND CURRANTS, our assortment is especially large and attractive, and embraces all the old and new sorts of worth and repute. So, also,

Gooseberries, Grapes and Strawberries,

which may be found with us in great variety and numbers. The cultivation of the smaller Fruits has always been a specialty with us. For descriptions and prices of our articles, we beg to refer to the new edition of our Catalogues, now in the hands of the printer, and soon to appear, viz:

No. 2. A descriptive Catalogue of Fruits;

No. 3. A descriptive Catalogue of Ornamental Trees, Shrubs, Roses, &c.;

No. 4. A descriptive catalogue of Dahlias, Green House, and Bedding Plants, &c.;

No. 5. A Wholesale Catalogue for Nursery men and Dealers.

Forwarded on receipt of a one cent stamp for each.

N. B.—The urgency of the season's demand upon us for Fruit Trees, &c., having compelled us to add largely to the means of supply afforded by our own Nurseries, we have recently purchased of Mr. Thos. Wright the entire property known as the Newark Nursery, and have associated with us in its ownership and management, Mr. Richard White, one of its former proprietors, as resident partner, by whom the business will be continued as usual, in the name of R. White & Co. By this arrangement our facilities for answering demands upon us are rendered abundant and complete; enabling us to sell as largely, at prices as low, on terms as inviting, and of productions as varied and excellent, as can be afforded by any other Nursery establishment.

THORP, SMITH & HANCHETT.

Syracuse, August 10, 1857. Sept-2t

SCARLET MAGNATE.

PRINCE'S SCARLET MAGNATE STRAWBERRY PLANTS, at \$1.50 per doz.; \$4 for 50; \$6 per 100. Prince's Imperial Scarlet \$1 per doz., \$2.50 per 50, \$3.50 per 100. Prince's Globose Scarlet \$1 per doz., \$3 per 50, \$4 per 100. Also Hooper's Seedling, McAvoys' Superior, Peabody, Walker & Scott's Seedlings, Ajax, Admiral Dundas, Compte de Paris, Gothic, Nimrod, Sir Harry and other celebrated varieties at greatly reduced prices.

(G—Priced Catalogues sent to applicants inclosing postage stamp.

H. A. MISH,

Keystone Nursery, Harrisburg, Pa.

AMERICAN FARMER—ADVERTISER.

HYACINTHS, TULIPS, DOUBLE DAHLIAS, &c.

THE SUBSCRIBERS offer this season a more extensive assortment than usual, of DUTCH BULBOUS ROOTS, imported from the best flower nurseries of Europe, in the finest condition, and all first class bulbs—embracing every desirable variety of DOUBLE AND SINGLE HYACINTHS, adapted for house or out door flowering.

EARLY AND LATE DOUBLE AND SINGLE TULIPS, of every shade and hue.

POLYANTHUS NARCISSUS.

ROMAN NARCISSUS, for early winter blooming.

SINGLE NARCISSUS.

DOUBLE AND SINGLE JONQUILS. CROCUS of all sorts, including some very fine new-named seedling varieties.

CROWN IMPERIALS.

FRITILLARIAS,

GLADIOLUS,

IRIS,

IXIAS,

LILIES,

ARUMS,

COLCHICUMS,

With numerous other sorts of approved tested value.

CATALOGUES of the above, with descriptions and directions for planting and managing, will be mailed to applicants enclosing a stamp.

HYACINTH GLASSES, FANCY CROCUS POTS, &c.

J. M. THORBURN & CO.

Seedsmen, &c.,

sept-1t

15 John street, New York.

TO SEEDSMEN, PLANTERS, &c.

THORBURN'S PRELIMINARY Wholesale Price List of VEGETABLE and AGRICULTURAL SEEDS, DUTCH BULBOUS ROOTS, DOUBLE DAHLIAS, &c., for the Fall of 1857, is just published, and will be mailed to Dealers and others requiring seeds in quantities, enclosing a stamp for return postage.

This year's seeds, so far as harvested, are of prime quality, generally abundant, and priced correspondingly moderate.

J. M. THORBURN & CO.

Seedsmen, &c.,

sept-3t

15 John-st., New York.

EVERGREENS

AND OTHER

Trees and Plants.

For PARKS,

LAWNS,

CEMETERIES,

GARDENS,

ORCHARDS, &c.

At wholesale and retail—delivered in New York, Philadelphia and Baltimore, AT THE LOWEST CASH RATES.

N. B.—The present (ninth) month, (September) is a favorable time for commencing the Autumn planting of Evergreens.

For CATALOGUES, &c., address,

DAVID J. GRISCOM,

sept-3t

Evergreen Nursery, Woodbury, N. J.

APPLE AND PEACH TREES FOR SALE.

THE SUBSCRIBERS would call attention to their stock, consisting of

100,000 APPLES TREES, from two to five years from bud or graft.

40,000 PEACH TREES, one year from bud.

20,000 PEACH TREES, two years from bud. Also

20,000 AMERICAN ARBORVITE, from three to five feet high—most of them having been twice transplanted. Address STEPHEN HOYT & CO.

New Canaan, Connecticut.

sept-3t



**ISABELLA AND CATAWBA GRAPE VINES.
OF PROPER AGE FOR FORMING VINEYARDS.**

CULTIVATED from, and containing all the good qualities which the most improved cultivation for over sixteen years, has conferred on the Croton Point Vineyards are offered to the public. Those who may purchase will receive such instruction for four years, as will enable them to cultivate the Grape with entire success, provided their locality is not too far north.

All communications addressed to R. T. UNDERHILL, M. D., New-York; or Croton Point, Westchester County, N. Y., will receive attention.

The additional experience of the four past seasons gives him full assurance that, by improved cultivation, pruning, &c., a crop of good fruit can be obtained every year, in most of the Northern, and all of the Middle, Western and Southern States.

N. B. To those who take sufficient to plant six acres, he directs, he will, when they commence bearing, furnish the owner with one of his Vine-dressers, whom he has instructed in his mode of cultivation, and he will do all the labor of the Vineyard, and insure the most perfect success. The only charge, a reasonable compensation for the labor.

Also, APPLE-QUINCE TREES, (which are sometimes called the Orange Quince,) for sale, above.

sept-3t R. T. UNDERHILL, M. D.

STRAWBERRIES, ROSES & BULBS.

W M. R. PRINCE & CO'S Descriptive Catalogues, for 1857, comprising all the finest varieties known, are now ready for applicants. sel-it

250,000 PEAR TREES,

Standard and Dwarf.

For Sale by

sept-2t

GEO. W. WILSON,

Maiden, Mass.

TOBACCO FARM FOR SALE.

THE SUBSCRIBER offers for sale, 200 Acres of land, seven miles from Annapolis, and within two hour's time by railroad of Baltimore and Washington. It lies between the railroad and the Severn river—bounded in part by the railroad on one side, and extending to navigable water on the other. It has a fine view of the beautiful sheet of water known as "Round Bay," and is within five minutes walk of the Station and Post Office at Crownsville.

The land is of excellent quality and very productive—not an acre, probably, that will not produce clover luxuriantly. A portion of the soil is peculiarly adapted to the growth of fine tobacco, but it is sufficiently varied to suit well all the usual farm products. The convenience to markets, both by railroad and water, and the character of the soil for the purpose, would make this farm very valuable for growing for market all of the finer fruits. There is now growing, and just coming into bearing, a small orchard of the best varieties of apples, peaches and pears.

The improvements consist of well framed houses, sufficient to cure some twenty hogsheads of tobacco; comfortable quarters for twelve or fifteen servants; corn house and other necessary out-houses, all built within a few years. There is no dwelling house. The place is remarkably healthy and abundantly watered.

Apply to Mr. Bryan on the farm, or the subscriber,

N. B. WORTHINGTON,

Office of Am. Farmer, Baltimore.

Annapolis and Upper Marlborough papers copy 3 times.

INGERSOLL'S IMPROVED PORTABLE HAY PRESS.

We call attention to this PRESS, which combines greater power and durability, requires less labor, occupies less space, and costs less money than any other Machine for baling Hay or Cotton, ever offered to the public.

Also, FAIRBANK'S HAY AND CATTLE SCALES.

For Sale by J. A. WESTON & CO.

sept-1y Sole Agents, 41 S. Charles-st., Baltimore.

AMERICAN FARMER—ADVERTISER.

IMPORTANT TO FARMERS.

PREMIUM IRON CYLINDER GRAIN DRILL,
WITH THE IMPROVED GUANO ATTACHMENT, AND GRASS
SEED ATTACHMENT.

THOSE wishing the above Machine must give their orders to the undersigned at once, to secure them in time for seeding. A great many were used last year and gave entire satisfaction. Some of the gentlemen's names are given below, and hundreds might be added.

EASTON, Md., June 22, 1857.

Messrs. Bickford & Huffman:

GENTLEMEN:—After a full trial of your Wheat Drill with Guano and Grass Sowing Attachments, I am of the opinion that it is of more importance to the successful and economical production of wheat, than any other implement which has yet been introduced to the public.

M. TILGHMAN GOLDSBOROUGH.

The undersigned having used Bickford & Huffman's Drill, concur in the above expressed opinion.

Thos. R. Holliday,
N. Goldsborough, Jr.
John C. Earle,
M. Worthington Goldsborough,
Barclay Haikins,
James N. Goldsborough,
R. France.

Eastern Shore of Maryland.

Address C. F. CORSER, Agent,
Office No. 90 South Charles street,
sept-2t between Pratt & Camden, Baltimore, Md.

THE LITTLE BRICK MAKER.

THE new Machine is now reduced in size, so as to be driven by one man. It takes the rough clay, previously one night in soak; tembers and moulds 420 bricks per hour, attended by two men and four boys. The brick is beautiful. Thus every farmer can be his own brick maker, as it requires only common laborers. Price \$65.

The larger machines worked by a horse, making 7000 per day, \$150—\$10,000, \$300—by steam 16,000, \$250—\$35,000, \$400.

For further particulars in a pamphlet, giving full instructions on brick setting and burning, address

sept-3t FRANCIS H. SMITH, Baltimore.

IMPROVED HAND POWER HAY PRESSES.

W. W. DINGEE & CO., York, Pa., make the cheapest and best PORTABLE HAY AND STRAW PRESS, having all the improvements suggested by 12 years' use. Such is the advantage of early orders to manufacturers, that 5 per cent. will be deducted from cash prices, on all presses ordered in September, to be furnished any time in 1857. Write at once for a Circular, which gives dimensions, prices, &c.

sept-1t

DRUMQUHASTLE AT PUBLIC AUCTION.

THIS desirable place, situate near Giovantown, about five miles from the centre of Baltimore city and two from Townsontown, the county seat of Baltimore County, adjoining the country seats of Messrs. Jos. Patterson, Whitley and others, and containing Fifty Acres of Land, will be disposed of at the Baltimore Exchange, on TUESDAY, the eighth day of September next, at 1 o'clock, P. M., to the highest bidder.

The ground is in good order, handsomely situated, and watered by two never-failing streams, and several excellent springs.

There is upon it an ORCHARD of choice Apple trees, just coming into full bearing, and a variety of other fruits. The improvements are a large DWELLING, finely shaded, Barn, &c., &c. Different churches, male and female seminaries, physicians, post office, mills, &c., convenient; also, three lines of omnibuses to the city daily and twice a day. The place is perfectly healthy.

TERMS:—One-third cash; one-third in six months and the balance in eighteen months—the deferred payments being properly secured and bearing interest.

For further particulars apply to the Auctioneers.

F. W. BENNETT & CO.

Auctioneers.

sept-1t*

sept-1t*

SINGER'S

SEWING MACHINES.

ALL persons who want a Sewing Machine of unrivalled utility, one that will sew the lightest and the heaviest fabrics better than any other, the best machine for family use, manufacturing, plantation use, or any use whatever—a machine that don't get out of order, and with which an industrious woman can readily

EARN \$1000 A YEAR,
can obtain it no where except at the office of I. M. SINGER,
& CO.

105 Baltimore Street, Baltimore,

Where the public are requested to call and see them in operation, on all kinds of material, from the finest cambric or cloth, to the coarsest calfskin or patent leather.

(Old machines taken in exchange for our new and improved ones—and copies of our *Gazette* sent gratis to all persons wishing information in relation to them.

sept-1t

W. E. BRODERICK, Agent.

THE AMERICAN FARMER'S

ENCYCLOPEDIA;

Embracing all the recent discoveries in Agricultural Chemistry, and the use of Mineral, Vegetable, and Animal Manures.

With DESCRIPTIONS and FIGURES of AMERICAN INSECTS injurious to Vegetation.

Being a Complete Guide for the cultivation of every variety of Garden and Field Crops. Illustrated by numerous engravings of Grasses, Grains, Animals, Implements, Insects, &c.

By GOUVERNEUR EMERSON, of Pennsylvania, upon the basis of Johnson's Farmer's Encyclopedia.

Price Four Dollars. Sent free of Postage upon receipt of price. "No Farmer should be without it." Published by

C. M. SAXTON & CO.
Agricultural Book-Publishers,

140 Fulton-st., New-York.

sept-1t

\$75 REWARD!

STOLEN on Saturday night August the 8th, from the stable of the Eagle Works, Harrisburg, Pennsylvania, a GRAY MARE, about 14 or 15 hands high, and about 8 or 9 years old, with glass eyes, white face, and an old scar on her right rump. She has a remarkably wide breast, and stands with her fore feet in towards each other; one of her hoofs is split. She is in good condition, a very fast traveller, and goes up hill in a trot or canter, but very carefully down hill, and has the habit of biting at a person who comes near her. There was also stolen at the same time, A SADDLE AND BRIDLE.

FIFTY DOLLARS will be paid for her recovery, and TWENTY-FIVE DOLLARS for the conviction of the THIEF.

Any person who has seen her since she was stolen, will be suitably rewarded if they will at once send information of the time and place. The person last seen with her was a man about 6 feet high, light complexion and 150 to 160 pounds weight, and belongs to a gang who have been stealing other horses, and it is supposed took others at the same time. Farmers and others are interested in ferreting out the gang.

It is supposed he went towards Maryland, and perhaps Baltimore or Frederick, or towards Chambersburg. Address

W. O. HICKOK,

Agent Eagle Works, Harrisburg, Pa.

A RARE CHANCE FOR A PHYSICIAN OR SMALL FARMER.

THE SUBSCRIBER offers for sale, for the next month, a small and productive Farm, of 341 acres of land, in Orange county, about 3 miles from the Orange and Alexandria Rail Road, in a wealthy and refined neighborhood. The land is in a good producing condition, divided into 4 fields, finely timbered and abundantly watered. A good Physician could at once command a profitable practice.

For further information I can be applied to in person on the adjoining farm or by letter at Rapid Ann Station, Culpepper Co., Va.

HENRY MASSIE.

sept-1t

AMERICAN FARMER—ADVERTISER.

AGRICULTURAL IMPLEMENTS, MACHINERY, &C. THOMAS NORRIS.

(OF THE LATE FIRM OF RICE & NORRIS.)

WOULD respectfully inform his friends and customers, farmers and dealers generally, that he is prepared to furnish as heretofore, all that is useful and valuable in the way of Agricultural Implements, Machinery and Garden Tools, Field and Garden Seeds. It would be too much of a task to name the almost innumerable variety of Implements—would say that there is scarcely anything in his line from the oldest to the latest improvement, or newly invented article that he is not prepared to furnish on equal terms with any other houses in the city. He would particularly call the attention of farmers to MANNY'S REAPER and MOWERS, which gave so much satisfaction last season. It is now ready for the approaching harvest, improved in all points indicating the slightest defect heretofore, and is now doubtless the very best combined Machine in the market; order early if you would secure this Machine.

GRAIN DAIRIES.—Those in want of a good and reliable Grain Drill, with Guano or Seed Attachment, can only have their expectations fully met by purchasing BICKFORD & HUFFMAN'S DAIRY, the only efficient Guano distributor I have any knowledge of; order this Machine early, or you may be disappointed, as many were last season, by ordering too late.

DWEY'S PATENT WIRE SPRING GLEANER.—Every farmer should have this valuable implement, by which all the wheat may be saved.

GRANT'S GRAIN CRADLES, WOLFE'S ditto, with best English Scythes, Grass Scythes and Snares, Revolving and Independent Teeth Horse Rakes, Large Hand or Loafer Rakes, the very best hand Grain and Hay Rakes in the market, made for real service. VANWICKLE'S Wheat Fans, warranted to give entire satisfaction. MONGOMERY'S Rockaway Fan, well known as a good Fanning Mill.

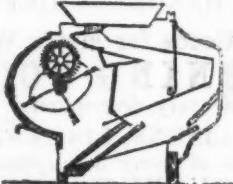
Horse Powers and Threshing Machines, of various sizes and prices, which give the best satisfaction to all that have tried them. Ploughs of every description. Cultivators, Harrows, Hoes, Spades, Shovels, Forks, Straw Cutters, Corn and Cob Crushers, Farm Mills, &c., &c. Garden, Field and Flower Seeds, &c., &c.

THOMAS NORRIS,

Agricultural Store, No. 48 Light St., Balt.

J. MONTGOMERY & BRO. DOUBLE SCREENED ROCKAWAY GRAIN FAN.

The best Fan in the United States—PRICE \$35.



It is needless to speak in detail of our celebrated Fan, as its own merits have won for it the approbation of all who have used it. We subjoin the following testimonials from among a large number which we have received:

TRAPPE P. O., TALBOT Co., Md., August 24th, 1857.

Messrs. J. Montgomery & Bro.

DEAR SIRS:—I write to ask you to send me a new direction for your Fan, which I purchased of you two years ago; the Fan has given me the greatest satisfaction in the thorough manner in which it cleans the grain, and in the ease with which it is worked. It cleans very fast; I consider it a most excellent Fan, and never had one in use that pleased me so well. Yours respectfully,

JAMES L. CHAMBERLAIN.

GLOUCESTER C. H., Va., June 3d, 1857.

J. Montgomery & Bro.

GENTLEMEN:—I have been using one of your Rockaway Fans since 1852, one that my father, R. D. Burns, of Bow-

ly's Wharf, Baltimore, bought of you, and it gives entire satisfaction; it is decidedly superior to any Fan that I ever saw, and as I will have from 1500 to 2000 bushels of wheat this year to clean I wish you to send me another with your latest improvement to it. Truly Yours,

ARTHUR N. BURNS.

Address J. MONTGOMERY & BRO.
No. 153 N. HIGH STREET, BETWEEN HILLEN AND GAY,
BALTIMORE, MD.

sept-1st

ALLEN & NEEDLES' SUPER-PHOSPHATE OF LIME.

CAUTION.—Be particular to observe that every barrel of our article has our name and that of Potts & Klett branded on the head. This Caution is rendered necessary, as there are so many articles of doubtful value sold under the name of Super-Phosphate of Lime, as to mislead those who are unacquainted with the value of a

GENUINE ARTICLE.

PRICE \$45 PER 2000 lbs. (2½ cents per lb.)

A liberal deduction made to DEALERS.

Orders for this valuable Fertilizer attended to promptly.

Pamphlets describing it, and the mode of applying, can be had gratis at our stores, or by mail when desired.

It has no superior as a MANURE for

WHEAT, RYE, CORN, OATS,

and all other crops requiring a vigorous and

LASTING FERTILIZER,

producing not only a heavier yield of Grain than PERUVIAN GUANO, but stiffening the straw to support the head.

GRASS SEED

very fails to take well where our Phosphate is applied to Wheat Lands.

PACIFIC OCEAN GUANO.

We have a small quantity still in store.

FISH MANURE.

A supply of this valuable article for sale.

PRICE \$30 PER 2000 lbs. (1½ cent per lb.)

No. 1 Government Peruvian Guano
for sale at the lowest rates.

The leading Agricultural Journals and Newspapers are regularly filed at our office for the use of Farmers.

Goods can be loaded at either front of our Warehouses. Farmers are recommended to drive to Water Street and avoid the crowded wharf. Ample facilities are afforded in loading Wagons and attending to the Horses.

ALLEN & NEEDLES,

No. 23 South Wharves,
and 41 (new style) South Water Street,
aul 3t First Store above Chestnut St., Phil.

JOHN T. WATKINS,

Manufacturer and Dealer in

CABINET FURNITURE,

No. 47 SOUTH STREET, BALTIMORE,
Has always on hand SOFAS, CHAIRS, BEDS, BED-
DING, and in fact every article relating to House Keep-
ing, for sale low for cash.

sept-1st

GUANO! GUANO!

THE UNDERSIGNED asks the attention of Farmers, Planters and Dealers to his stock of best quality GUANOS, all of which he will sell at the lowest market rates.

“**A** PERUVIAN GUANO, of the latest importations and best quality.

“**AA** MEXICAN GUANO of the best cargoes imported.

COLOMBIAN GUANO, very rich in Phosphates.

Also, Super-phosphate of Lime, Bone Dust, &c.

Purchasers may rely on having their Guano shipped in prime order, and in superior bags. The general satisfaction heretofore given by all Guanos sold by the Subscriber, he hopes will be a sufficient guarantee that all articles sold by him will be found as represented.

WILLIAM ROBINSON,

No. 4 and 6 Hollingsworth Street,
Near Pratt street Wharf,
BALTIMORE, MD.

sept-2t.

DRY GOODS, CARPETINGS, &c.,
ROYSTON BROTHERS,

(SUCCESSORS TO ROYSTON & CO.,

81 BALTIMORE STREET, BETWEEN SOUTH AND GAY,

Keep constantly on hand a large stock of

HOUSE-KEEPING DRY GOODS; GENTS AND YOUTHS WEAR; LADIES' DRESS GOODS, in all their variety; LINEN HANDKERCHIEFS; HOSIERY; GLOVES; SHAWLS, &c.; HEAVY GOODS, for farm hands and servants.

CARPETS; OIL CLOTHS; MATTINGS; DAUGETS; RUGS, TABLE AND PIANO COVERS, &c.

sept-1ly

FOR SALE,

A FULL blooded young Bay STALLION, three years old last May. If trained he will rack a mile in 3 minutes. For further particulars apply to

JOHN B. FOUST,
Glenn Rock, York Co., Pa.

sept-1t*

“RHODES”

SUPER PHOSPHATE OF LIME

Manufactured from Formula of Dr. James Higgins, State Chemist of Maryland.

ITS IMPORTANCE FOR TOBACCO AND CORN.

Extracts from report of Superintendent of the Model Farm of Virginia and North Carolina, near Petersburg, Va., made December 11th, 1853:

“On the 4th and 5th of this month sent to market 250 lbs. of Leaf Tobacco and 40 lbs. Lugs, which was sold at Moore's Warehouse, by Messrs. Jones & Elliot, very kindly without charge; the Leaf bringing \$0.50, and the Lugs \$6 1/4 per hundred, equal to \$115.25. The above presents the product of 3,800 plants, at distances 3 1/2 feet apart each way. 300 lbs. ‘Rhodes’ Super-phosphate was applied broadcast, leaving space without any such application. The space on which none of ‘Rhodes’ Super-phosphate had been applied, was throughout the entire season inferior to the other, with a yield of at least one-third less in weight.” “That portion of the crop (corn) which had an application of ‘Rhodes’ Super-phosphate was considerably benefitted, and withstood the effects of the prevailing droughts of the season with less injury.”

The above article can be had of our Agents:

Richmond, Va., Messrs. SCHAEF, KOHLER & CO.
Petersburg, Va., “ VENABLE & MORTON,
Wilmington, N. C., Messrs. KEITH & FLANNER,
Charleston, S. C., “ RHETT & ROBISON,
Savannah, Geo., “ OGDEN, STARR & CO.
Montgomery, Ala., “ JOHN H. MURPHY & CO.
Price in Baltimore, \$42.50 per ton of 2,000 lbs. in bags,
150 lbs. each—Cash.

B. M. RHODES & CO.

jel 141 W. Pratt street, Baltimore.

SPLENDID STOCK

OF

DRY GOODS.

HAMILTON EASTER & CO.

Invite the attention of persons visiting Baltimore, to the large and splendid stock of Goods in their

NEW MARBLE BUILDING,

Nos. 199, 201 and 203 Baltimore Street.

Importing the greater portion of our stock—one of the firm visiting the various European Markets twice a year, for that purpose—we are prepared to offer to WHOLESALE AND RETAIL PURCHASERS, goods of the best class at very low prices, including

Black and Colored Silks,

AND

ROBES.

FINE DRESS GOODS,

of every fabric,

LOW AND MEDIUM PRICED DRESS GOODS,

SHAWLS, SCARFS,

MANTILLAS AND CLOAKS,

GLOVES, HOSIERY,

CRAVATS,

HANDKERCHIEFS, &c.

Choice Goods for Men's Wear.

MOURNING GOODS,

of every description.

IRISH LINENS, LINEN GOODS, and articles of every description in the way of HOUSEKEEPING DRY GOODS.

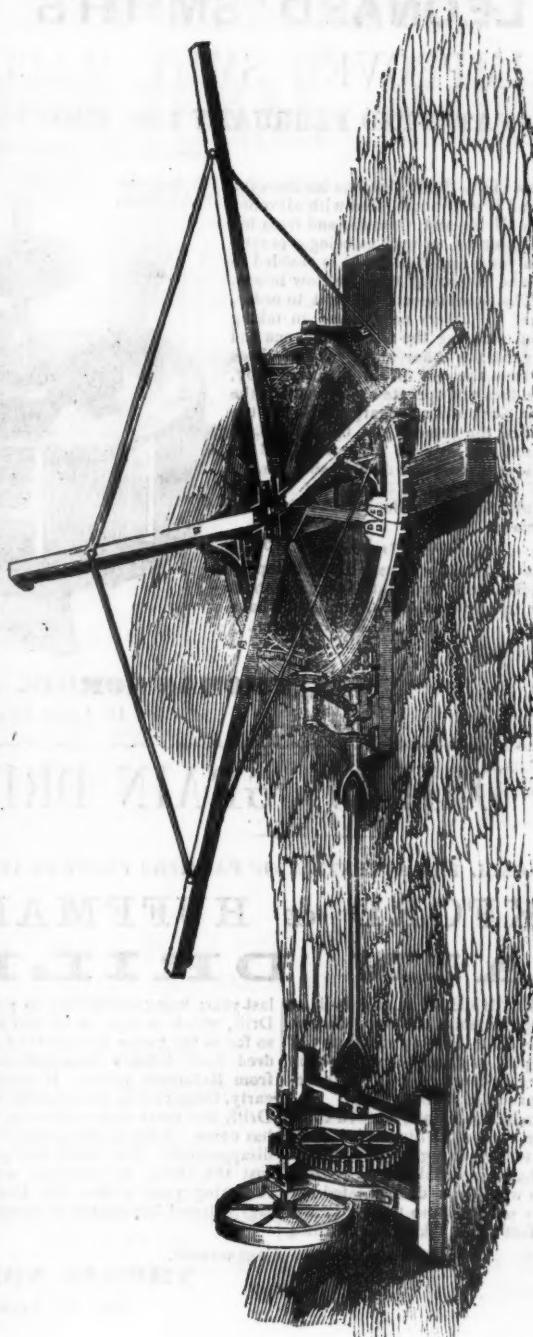
ALWAYS ON HAND, such Goods as are required by PLANTERS AND FARMERS, for SERVANTS' USE—such as Bleached and Brown Cottons, Osnaburghs, Jeans, Linseys, Plaids, Fulled Cloths, Sattinets, Blankets, &c.

No deviation from first price named for any article.

Wholesale Rooms on second and third Floors.

jyl-6t

SINCLAIR & CO'S PREMIUM
BEVEL GEARED SEGMENT HORSE POWER NO. 2.



The above Figure is a correct representation of our late Improved Bevel Geared Segment Horse Power No. 2, and the same that received the First Premium from the Maryland Agricultural Society, in 1854 and 1855. It is excellent in every particular. We make a smaller size of same construction. Price of No. 1, \$100; No. 2, \$125. Capacity of No. 1, 2 mules; No. 2, 6 to 8 mules. For large wheat growers, we decidedly recommend the No. 2 machine.

R. SINCLAIR, JR. & CO.
Warehouses, 58, 60 & 62 Light Street, Baltimore.

AMERICAN FARMER—ADVERTISER.

LEONARD SMITH'S LAST IMPROVED SMUT MACHINE. PATENTED FEBRUARY 12th, 1850.

The Patentee has been in the Smut Machine business for the last eleven years, and is well acquainted with all other Smut Machines in the U. S. and Canada, and from his long experience in the business, as well as being a practical miller of fourteen years experience, he is enabled to furnish the best Smut and Scouring Machine now in use.

WARRANTEE.—The machine will be sent to order, and warranted to excel all others now in use, in taking out smut and chaff, and scouring the fibres from one end of the berry and the germ the other and a trial of three months will be given from the day of shipment at Troy, N. Y.; and if the same does not operate as warranted, the machine will be taken back and no charge made for the use of the same, provided the same is put up and run according to directions and not injured or broken, and returned within three months from the date of shipment at Troy.

The subscriber has also for sale a Buckwheat Scourer, which is highly appreciated.

Baltimore, July 24th, 1857.

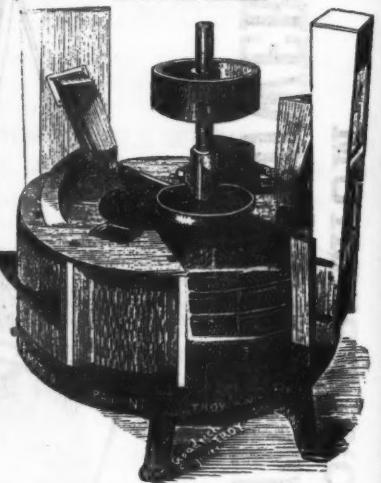
This is to certify, that I have now in use, in the Patapsco Mills, two of Smith's Smutters, and that I consider them equal, if not superior to any machine of the kind I have ever used.

CHARLES A. GAMBRILL.

For Sale by

THOMAS NORRIS, Agent,

48 Light Street, Baltimore.



GRAIN DRILLS! GRAIN DRILLS!!

I WOULD CALL THE ATTENTION OF FARMERS PARTICULARLY TO BICKFORD & HUFFMAN'S GRAIN DRILLS.

The GUANO ATTACHMENT to said Drill is, so far as my knowledge extends, the only efficient distributor of Guano in use. Having sold many of them several seasons past, and had the satisfaction to hear but one universal report of entire satisfaction from those that have used them.

I have, in former advertisements, warned those who wish to purchase a good Drill to give their orders early, in order to secure a good Drill: some of my customers say that this warning is a "trick of the trade," but some who were disappointed last year, have given their orders more than a month ago, as they felt the effect of not taking the warning

last year; being compelled to purchase some other Drill, which is now to be laid aside as worthless, so far as the guano is concerned. Over three hundred have already been ordered up to this time from Baltimore alone. If orders are handed in early, farmers may be supplied with this excellent Drill; but there is no certainty, when seeding time has come. I say to all, order early or you may be disappointed. The Drill has proved itself to be just the thing, as hundreds are ready to testify. Awaiting your orders for Drills, or any other Agricultural Implement or Machinery,

I remain the public's obedient servant,

THOMAS NORRIS,

No. 48 Light Street, Balt.

jyl

SINCLAIR & CO'S
IMPLEMENT'S
AND
AGRICULTURAL MACHINERY,
FOR FALL AND WINTER USE.

We are now manufacturing and offer for sale, a valuable stock of IMPLEMENTS and MACHINERY, which we warrant inferior to none in the United States. The best, and those most prominent, are as follows, viz :

Our

Patent Screw Propeller Straw & Hay Cutters,

We make of these unrivalled machines five sizes, price \$20 to \$45.

IRON AND STONE CORN MILLS.

Price, for most current sorts for Farm use, \$50 to \$110.

READING'S PATENT CORN SHELLERS,

Capacity 2,500 bushels per day. Price \$55. Do. with Fanning Attachment, \$65. Also various other patterns, for Hand and Horse Power, at \$10 to 25.

HICKOCK'S PATENT CIDER MILL AND PRESS.

Recently much improved. Price \$45.

FANNING MILLS, adapted for cleaning wheat, corn, oats or grass seeds—
Price \$28, 33 a \$38.

COOPER'S LIME SPREADERS. Price \$85.

PLOWS AND HARROWS.

We invite the attention of Farmers and Planters to our large assortment of PLOWS and HARROWS. The sorts and sizes are various, and adapted for every description of soil and cultivation. The following plows are most current and particularly recommended, viz :

PATUXENT PLOWS.

SIZE,	6	7	8	9	11	inch.
PRICE,	\$4.50	5.00	6.00	7.00	9.00	

DAVIS AND IMPROVED DAVIS PLOWS.

SIZE,	6	7	8	10	inch.
PRICE,	\$4.00	4.50	5.00	6.50	8.00

MINOR AND HORTON PLOWS—7 sizes. PRICE \$3.50 to \$9.

IMPROVED BAR-SHEAR PLOWS, 6 to \$15.

TWO and THREE FURROW GANG PLOWS, for seeding and cultivation.

PRICE \$5.50 and \$6.50.

Also ten other patterns, adapted for heavy or light land.

20 sorts HARROWS, including the W and best pattern.

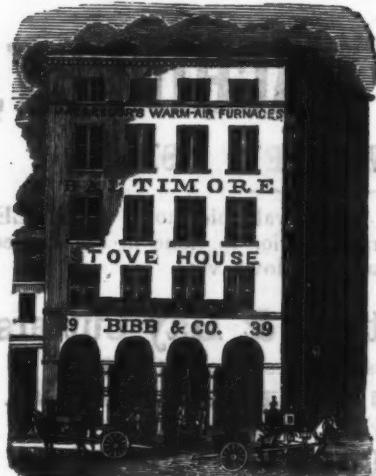
FOR SALE BY

R. SINCLAIR, JR. & CO.

62 LIGHT STREET, BALTIMORE.

sepl

BALTIMORE STOVE HOUSE



Stoves, Hot-Air Furnaces, Fire-Place

Stoves, Ranges, Cambooses, &c., &c.

OUR FRIENDS and the public generally are informed, that having largely increased our facilities, we are now prepared to supply promptly all articles in our line, wholesale or retail, at LOWEST CASH PRICES, or on usual credits to punctual customers. We name in part the following:-

FIRE-PLACE HOT-AIR STOVES—Five varieties, viz:—the Improved Feincour, McGregor, Aughee's, Neer's, &c., &c.

HOT-AIR COOK STOVES—Twenty most approved kinds, viz:—Improved and Re-Improved Old Dominion, Hercules, Troy Star, Welcome, Fulton, Globe, Maryland and Virginia.

HOT-AIR FURNACES—The celebrated McGregor, seven sizes, both portable and brick work.

RANGES—Six different kinds, viz:—Pond's Elevated Oven, Peirce's do. for wood or coal, (one of these are so arranged as to heat additional rooms above,) St. Nicholas, Mott's Invincible, &c.

PARLOR STOVES—Of all imaginable kinds and varieties, beautiful patterns, such as Radiators, Franklin's Grates, &c., &c. arranged to burn both hard and soft coals, as well as wood.

AGRICULTURAL BOILERS—Three kinds, the Newsham's, McGregor and Mott's, for wood or coal, holding from 10 gallons to 300.

SCOTT'S LITTLE GIANT CORN AND COB MILLS, Nos. 1, 2, 3 and 4—So favorably known and extensively used, are offered at unprecedented low rates, to close stock on hand.

We are prepared with a large force to PUT UP or REPAIR all the various articles appertaining to our line, whether sold by us or not.

Purchasers will find it decidedly to their interest to examine our large and well selected stock of first class wares before leaving their orders elsewhere.

BIBB & CO.

SUCCESSORS TO ROBBINS & BIBB,

AT THE OLD STAND, No. 39 LIGHT ST., BALTIMORE.

Circulars and a List of Prices can be had on application as above.

sept-1st

GUANO! GUANO!!

To Farmers, Planters and Others.

The undersigned, having been extensively engaged for some time past in the above trade, a fact well known to the agricultural community and others, would take this method of informing his friends generally, that having made arrangements, as heretofore, he is fully prepared to furnish them with a first rate article of LETTER A PERUVIAN GUANO, directly from the hands of the agent of the Peruvian Government, on as low and accommodating terms as any other house in the city; and would take occasion to state that he has determined to give his individual and entire attention to the trade of FERTILIZERS, and first quality of

stances his customers may rely on the certainty of always getting a first rate article.

In his list of Fertilizers, will be embraced, in connection with

PERUVIAN GUANO,

ALL THE BEST BRANDS OF
MEXICAN GUANOS, A AND A A,

AND ALSO,

COLOMBIAN GUANO,

DE BURG'S SUPER PHOSPHATE OF
LIME,

AND A SUPERIOR QUALITY OF
FINE GROUND BONE-DUST:

ALL OF WHICH WILL BE SOLD ON PLEASING
TERMS, BY

ROBERT TURNER,

No. 47 SOUTH FREDERICK ST.,
Baltimore, Md.

FIELD SEEDS,
such as he will be prepared to furnish from the best selections, so that under the circum-

sept-1st

ADVERTISING SHEET.

AGENCY FOR THE PURCHASE OF GUANOS AND OTHER MANURES,

AGRICULTURAL IMPLEMENTS, STOCK OF ALL KINDS, &c., &c.

The subscribers continue their Agency for the purchase of PERUVIAN, COLOMBIAN, MEXICAN and other GUANOS, and the various manufactured MANURES, and those who may entrust their purchases to them, may rest assured of obtaining the purest and best articles. Orders must be accompanied with the cash to secure prompt attention.

S. SANDS & WORTHINGTON,

Publishers American Farmer, Baltimore, Md.

PURE NO. 1. PERUVIAN GUANO OF DIRECT IMPORTATION.

We are again prepared to supply Farmers and Planters or their Agents with pure Peruvian Guano of direct Importation this season, full weight in new strong bags, and Baltimore inspection.

The very superior character of the guano and the condition of the packages furnished by us in former seasons, as admitted by our friends, will be a sufficient guarantee that all future orders will receive our best attention. Our purchases are made by the cargo from the Agent of the Peruvian government, and our customers may consequently rely upon obtaining the genuine article, and of a very high per centage of ammonia.

We have also on hand a few tons of the genuine African Guano, equal to any compound of Peruvian and Mexican. Also Mexican Guano containing 65 per cent of Phosphate of Lime. Colombian Guano, De Burg Super-Phosphates, and all other kinds of fertilizers which we deem worthy of recommendation to the agriculturist.

P. MALCOM & Co.,
GRAIN AND GUANO WAREHOUSE,
Wood Street, Bowly's Wharf, Baltimore, Md.

THOROUGH BRED AYRSHIRES FOR SALE.

 BEING overstocked, I offer for Sale 25 head of thorough bred Ayrshire Cattle, Bulls, Cows and Heifers, from 1 month to 10 years old, at prices ranging from \$25 to \$200. Purchasers at a distance may rely upon having their orders filled as fairly as those who apply in person.

RAMSAY MCHENRY,
Emmorton, Harford County, Maryland.

HIDE, LEATHER AND OIL WAREHOUSE.

No. 43 SOUTH CALVERT ST.,
Baltimore, Md.

F. H. GRUPY, late of GRUPY AND STANSBURY, takes this means to thank his old patrons and customers for their patronage and custom heretofore bestowed on his house, and solicits a continuance of the same now to himself. He has purchased and located himself at 42 South Calvert street, next door to B. Deford & Sons, and one door from Lombard street, where he will keep as usual, as general and complete an assortment of LEATHER as can be found in Baltimore, and at as low a price.

10,000 HIDES WANTED.

I will pay at all times the highest cash prices for Green and Dry Hides. I am now paying 7 to 8½ cents for Green Hides, and 15 to 20 cents for Dry Hides. Sheepskins and Tallow wanted at all times, and highest cash prices paid. For further information address

F. H. GRUPY,

No. 43 SOUTH CALVERT ST., BALTIMORE.
All persons having Hides to sell will find it to their interest to let me know before selling.

marl-3t & sept-3t

WILLIAM H. EMORY,
COMMISSION MERCHANT,
FOR THE SALE OF GRAIN AND PRODUCE,
mhly* No. 14 Bowly's WHARF, BALTIMORE.

AGENCY FOR THE PURCHASE AND SALE OF IMPROVED BREEDS OF ANIMALS.

Such as CATTLE, SHEEP, SWINE, POULTRY, &c. Pure ground BONE DUST, and SUPER-PHOSPHATE OF LIME of reliable quality.

Apply at No. 75 Dock street, or at the third door East of 16th street, in South street.

AARON CLEMENT, Agent.

N. B.—A superior article of COAL for sale, on the most reasonable terms. Apply as above.

apl-tf

C. W. SLAGLE & CO. COMMISSION AND PRODUCE MERCHANTS,

118 & 133 NORTH STREET, BALTIMORE,

THANKFUL to our friends for past favors, we would continue to solicit consignments, and pay personal attention to the sale of FLOUR, GRAIN of all kinds, CLOVERSEED, WHISKEY, CORN MEAL and COUNTRY PRODUCE generally. We have for sale Guano, Fish, Salt, Plaster, Clover and Timothy Seed at the lowest rates. jely-ly

TO PERSONS OUT OF EMPLOYMENT.

WANTED—In every county in the United States, active, industrious, and enterprising men, as Agents, for the sale, by subscription, of valuable and interesting books; all of them being expressly adapted to the wants of every family, and containing nothing of a pernicious or injudicious tendency. Our publications are among the best in the country, and good Agents can realize a profit from \$2 to \$3 per day by engaging in the business. A small capital of only \$50 to \$50 is required. For further particulars, address ROBERT SEARS, Publisher, apl-6t 181 William Street, New York.

DRAINING TILE.

THE subscribers have constantly on hand any quantity of DRAINING TILE of the most approved patterns, which they will dispose of at the following prices:—1½ inch bore \$12 per thousand, about one foot bore each; 2½ inch bore \$15; 4 inch bore \$25; Gutter Tile \$20. They also keep constantly the best Sand Press Brick, \$15, and Fine Brick, \$25. Samples can be seen. Orders left at the office of American Farmer, or direct to the subscribers

RITTENHOUSE & CRAWFORD, Brick Makers,
W. Pratt St., near the Cattle Scales, Balt., Md.

(3) Southern Planter copy six months, and send bill to this office.

jan 1

LUMBER! LUMBER!!

BURNS & SLOAN beg leave to inform farmers, their friends and customers that they will continue the LUMBER BUSINESS as heretofore at their old stand, corner of GERMAN and EUTAW STREETS, and also at 116 LIGHT STREET WHARF, at the yard lately occupied by Hugh McElberry, Esq. Our facilities being increased it will enable us to offer great inducements to buyers.

mhi-lyr

AMERICAN FARMER--ADVERTISER.

COLOMBIAN GUANO.

Philadelphia Guano Company,

No. 5 O'DONNELL'S WHARF, BALTIMORE.

It can hardly be necessary to call the attention of the intelligent farmer to this most valuable manure. It has been tried quite extensively throughout this state and Virginia, as well as in many Southern States, and we are continually receiving the most flattering accounts of its action upon the soil. In the majority of cases, it is unquestionably the most valuable fertilizer ever presented to the public. Its superiority over Peruvian as a permanent manure is too well known to require any elucidation from us. The following remarks, however, may place the subject in its true light in the eyes of those who have not yet become acquainted with its merits.

The theory of the action of this guano is very simple. The growing plant must have a certain amount of inorganic matter, or it cannot thrive. Chlorine, sulphuric acid, soda, silica, lime, phosphoric acid, alumina, iron and other ingredients are all needed for the full and complete development of the plant. If the soil possesses these substances in sufficient quantity, there is no difficulty in forcing an abundant growth. This is the reason why Peruvian guano is succeeded so well on the poor lands of this State. Lying idle or comparatively so, for a number of years they have accumulated by the gradual decomposition of the subsoil, and by the action of the scanty vegetation which grew upon them, a large stock of inorganic matters, but being deficient in ammonia, they needed the peculiar stimulus which that substance imparts to vegetation. The feeble growth which they were able to sustain, could not appropriate the elements so abundantly supplied, and the crops upon them starved in the midst of plenty. Peruvian Guano gave to the plants the necessary vigor, and enabled them to draw freely upon these great stores of mineral matters. It has been demonstrated, however, that Peruvian Guano does not in itself possess a sufficient amount of these inorganic substances to keep up the fertility of the land. A time, therefore, inevitably arrives when this guano is incapable of augmenting the growth of plants to any considerable extent. By forcing vegetation, it creates a demand upon the soil for its inorganic materials, and to that extent impoverishes it.

If the character of the staple crops of Maryland be taken into consideration, it is easy to see what inorganic substance is most heavily drawn upon. Indian Corn, as shown by all analysis of its ashes, consumes a prodigious amount of phosphates. Tobacco also takes a great deal of inorganic matter, and this is permanently removed, as the whole crop is sent away. Live stock diminishes the amount of Phosphates by the amount required for their bones. It is evident then that the principal drain upon the soil is that which carries off the Phosphates. It is also perfectly clear that these must be restored in some way, if the farmer would keep up the fertility of his land.

To get these important ingredients he must resort to bone dust, to Mexican, or to Colombian Guano. Of the former article there is a limited supply, and for the amount of phosphoric acid it contains, the price is high. Mexican Guano supplies phosphate of lime cheaply and abundantly. In it the phosphate of lime is believed to exist in the same state of combination in which it occurs in bones. In Colombian Guano, however, it is found in a different form, the peculiar advantages will be understood by perusing the following extract from Dr. Piggot's report:

You have requested me to state the advantages which might be expected to be derived from this fertilizer in view of its chemical constitution. The first and most evident, is the uncommonly large proportion of Phosphoric Acid which it contains. It is by far the richest known source of this valuable substance. The amount of phosphoric acid which is contained in the 87.92 parts of neutral phosphate of lime, belonging to the sample analyzed, would, if combined with lime, in the proportion to form bone-phosphate, make 100 14 parts of that compound. Hence it follows, as a matter of necessity, that in the decomposition of this manure in the soil, about 12 per cent more phosphoric acid will be given to the plant, than could

possibly be extracted from the same quantity of bone earth, by the same solvents.

Another important consideration, is the greater solubility of this phosphate in ammoniated water. As all rain water, and most soils, contain ammonia, and as the organic part of this guano, when decomposed, generates a small quantity of the same alkali, the manure, while in the soil, will be acted upon by water, holding ammonia in solution. Now, this induces in the neutral phosphate a change which does not take place in bone earth. On the latter, it has no action whatever, but it converts the former into bone phosphate, by combining with a portion of phosphoric acid, to form phosphate of ammonia. Colombian Guano may therefore be regarded as playing a very important part in the fixation of the volatile alkali.

The permanency of this manure is a matter so well understood by every practical farmer, that it requires no comment. Very respectfully yours, &c., A. SNOWDEN PIGGOT.

OFFICE INSPECTOR OF GUANO, 11 Exchange Building. Analysis of an average sample of "Colombian Guano," imported by Wm. F. Murdoch, Esq. Agent of the "Philadelphia Guano Company," March 17th, 1856, in the "Mary Elizabeth."

Phosphoric Acid,	40.25
Lime, &c.,	59.75
40.25 per cent. of Phosphoric Acid is equal to 87.92 per cent. of Bone Phosphate of Lime.	WM. SMITH REESE.

CHARACTERISTICS OF COLOMBIAN GUANO.

1.—It is by far the richest source of phosphoric acid for the farmer yet known, containing one-third more than ground bones.

2.—It contains less than one-fourth of the water always present in the Peruvian, and 20 to 30 per cent. less than any other guano—consequently, it can be packed in bags, at a diminution of one-half the freight and labor, besides the convenience of handling, and subsequent value of the product.

3.—It is sold in fine powder, and does not require sieving, as do the Peruvian and other Guanos, in order to their uniform application.

4.—It does not injure the nails of the laborer in sowing, on account of the absence of lumps, and for the same reason it can be applied in one-half the time, with a drill, with perfect uniformity. Whereas, guano containing lumps cannot be distributed uniformly, even with the aid of a drill.

DAVID STEWART, M. D.,
Chemist of Md. State Agricultural Society

The practical value of this guano will be perceived by the following extract from the American Farmer, giving actual results of direct experiment:

COLOMBIAN GUANO.—We have heard casually of some trials of the Colombian Guano, showing very favorable results from its application, and have reason in our own experience to be much pleased with it, where we have been able to give it a fair trial; especially as to the permanency of its action. A statement from Mr. J. W. Brown, a farmer of Prince George's County, gives very strong testimony in its favor, estimating its effects upon corn last year as one third greater than Peruvian or Manipulated Guano used in same quantity, and thus far this season superior to Peruvian on wheat. We should be very glad to hear from others of our subscribers who have used it.

We have been at some pains to determine the best fertilizer for this crop from the experience of practical men, and do not hesitate in our preference for a combination of Peruvian with Colombian or Mexican Guano. The writer has now such emphatic evidence on the growing crop of wheat, of the permanent effect of the Colombian Guano obtained from the Philadelphia Guano Co., and applied the first week of last June, that he gives that the preference decidedly over the Mexican for his own land. The experience of others satisfies them with the Mexican, and its lower price recommends it. The combination and thorough mixing of either of these with Peruvian, will produce probably the greatest effect of both. This mixing is not essential, however, and they may be, and are most usually applied separately. Peruvian Guano alone ensures a good crop—Mexican alone a poor crop—but Peruvian and Mexican together, a crop much superior to Peruvian alone. An intelligent correspondent of the Petersburg Farmer, Mr. R. H. Crawley, in narrating his experiment of last

AMERICAN FARMER — ADVERTISER.

year, says: "The difference in favor of that portion of the field which had the application, both of Peruvian and Mexican, was so perceptible as to make a streak through the field, which could be perceived half a mile throughout the growth, and when it came to the knife I am certain that one plant was worth two; and after it was cured, I think I could have picked nearly every plant out, though it was mixed in the barns."

We also call attention to the following from Pennsylvania:

COLOMBIAN GUANO.

Col. Samuel Bengtson, a very intelligent and successful farmer in Chester County, Pennsylvania, states: "The result of my experience in the use of Colombian Guano are of the most favorable character. Aware that the fertility of the soil could only be preserved by restoring to it the phosphates of which it is so largely deprived by every crop I was not prepared for such decided benefits as I have realized. Its effect upon my corn crop was so marked as to attract the attention of every observer. It was my first experiment with it. The circumstances under which it was made were favorable for affording a fair test. In adjoining fields, the soil of which was of the same character, and equally well tilled, my neighbor and myself planted our corn, determined to omit nothing to ensure a good yield. The season (that of 1856) was unfavorable from protracted drought. I applied the Guano by mixing about 200 lbs. of plaster of paris to 100 lbs. of the former. About four table spoonfuls were scattered to each hill—dropping the corn on it and covering it with earth about 3½ inches deep.

My neighbor, an excellent farmer, relied upon the ordinary fertilizers. A very marked difference in the crops of the two fields soon became apparent. The plants in mine grew vigorously and attained great size. The principal benefit however, was exhibited where it was most wanted, and which is characteristic of the phosphates, viz: in the ears. They were of unusual size, found not here and there, but uniformly throughout the entire field. My yield was 100 bushels to the acre.

The crop of my neighbor was stunted—the ears very small and the yield not over 30 bushels to the acre.

Now to the advantages derived from it as a top-dressing to our grass fields less decided. He adds further that the Colombian Guano was extensively used last fall, by farmers in this and the adjoining townships, on their wheat crops, with the most encouraging results."

Dr. Webb, on one of his farms in New Jersey, where the Colombian Guano was used, reports the most decided benefits to have resulted.

W. J. Taylor, Esq., a gentleman of great intelligence, and eminent as an agricultural chemist, in a letter dated in Worcester County, Maryland, May 25th, 1857, states: "It is with pleasure I write you of the satisfaction gentlemen express in this section of the country, who have made use of the Rock Guano, (Colombian.) The finest crop of wheat which is to be seen is from the use of this article. The advantages are also to be seen on grass where it has been applied as a top-dressing."

To these testimonials we might add numerous others, but we deem it unnecessary. Evidences of its inestimable value are not confined to our own country—they are confirmed by agriculturists in England. Mr. Robert Bell, an eminent Merchant, of Liverpool, under date of May 15, 1857, states: "Respecting this article, Dr. Voelcker, Chemist of the Royal Agricultural College, having under his care 700 acres of land belonging to that Institution, remarks: "It becomes a matter of great public interest to promote the importation of a Guano (Colombian) calculated to excel it (the Peruvian) in practical use, and especially to landlords who would desire to encourage a system of cultivation at once immensely remunerative to the farmer, and permanently improving to the land."

LOCUST GROVE, Frederick County, Md.,
June 13th, 1856.

MR. EDITORS:—At the solicitations of the Agent of the Philadelphia Guano Company of Baltimore, I propose to write to you upon the beneficial results of Mexican Guano. Last Fall I purchased eleven tons of Mexican Guano of the Agent of the Philadelphia Guano Company in Baltimore. A portion of which I used on my wheat crops, and the balance was used by several of my neighbors. I mixed about one-third part of Peruvian Guano with two-thirds Mexican, and applied about two hundred weight per acre; the result is, where it escaped the ravages of the fly, (which are very severe in this vicinity,) the appearance of a good crop.

On a field which I had in corn last summer, and on

which I sowed wheat last fall, I applied Mexican Guano mixed with Peruvian, in the proportion as stated above, except two acres, on one of which I applied two hundred weight of Peruvian Guano, and on the other I applied three hundred weight of A.A. Mexican Guano, leaving the space of two corn rows between; the result is, there is but a slight shade of difference, if any, in favor of the Peruvian Guano, though the expenditure of money was almost double in the part I applied the Peruvian Guano. As it regards the part that was used by my neighbors, they speak favorably of it; and I think it only remains for its productive qualities to be known, to render it a useful and beneficial fertilizer.

Yours, with respect,

THOS. A. BAKER.

PRINCE GEORGE'S CO., MD., May, 1857.

To Wm. F. Murdoch, Esq.,

Agent of "Philadelphia Guano Co." Baltimore:

This is to certify, that in the year 1856 I used on the same lands Peruvian, Manipulated and Colombian Guanos, for corn, and where the latter has been used, the yield has been one-third greater than where the others were applied in equal quantity. And where I have used same guanos on wheat, in equal quantities and on same quality of land, the wheat where I have used the Colombian, looks at this time by far the best.

JULY 1. J. W. BROWN.

MARYLAND LOTTERIES, Office No. 3 S. Calvert Street, BALTIMORE.

\$5,000 LOTTERY.

SPECIAL NOTICE.

The Famous and Lucky Patapaco Lottery, (small fry) will hereafter be drawn six times in each week.

CAPITALS.

- | |
|---|
| 1 Prize of \$5,000 Dollars is \$5,000 Dollars. |
| 1 Prize of \$3,000 Dollars is \$3,000 Dollars. |
| 1 Prize of \$2,500 Dollars is \$2,500 Dollars. |
| 1 Prize of \$1,500 Dollars is \$1,500 Dollars. |
| 1 Prize of \$1,250 Dollars is \$1,250 Dollars. |
| 5 Prizes of \$1,000 Dollars are \$5,000 Dollars. |
| 10 Prizes of \$500 Dollars are \$5,000 Dollars. |
| 10 Prizes of \$250 Dollars are \$2,500 Dollars, &c. |

Tickets \$1; Halves 50 Cents; Quarters 25 Cents.

2 Wholes, \$15 00 | 25 Quarters, \$3 75
52 Halves, 7 50 | 25 Eighth, 1 87

In the Small Lotteries I average the sale of the highest Capitals at least twice a week, and the prizes have generally fallen into the hands of those who stood in need of money. Persons desirous of giving the small Lottery a fair trial, should take the best plan and send me \$60, for which I will return four Certificates of Packages of whole Tickets, in all, 100 Tickets, the loss on which could not exceed the money paid, and stands not only a very good chance for a high Prize, but a fair one for a handsome little fortune. Four packages of consecutive numbers but seldom missing a good 3 No. Ticket, varying from \$100 to \$5000.

All orders to secure the earliest attention and best selection of regular packages, or single tickets and shares, must be forwarded without delay, and addressed to the great Prize Agent,

JAMES FLETCHER, Box 753 Post Office, BALTIMORE, MD.

(*) The official drawing of these great Lotteries, duly certified to by the State Commissioner, will be sent immediately after it is drawn, to all who order from me, with a full explanation of the result. The above list contains only the capitals; the prizes in every Lottery vary from the price of Tickets upwards.

JULY 1.

LUTHER O. HARDING. WILLIAM HOPKINS.
HARDING & HOPKINS,

GROCERS AND COMMISSION MERCHANTS

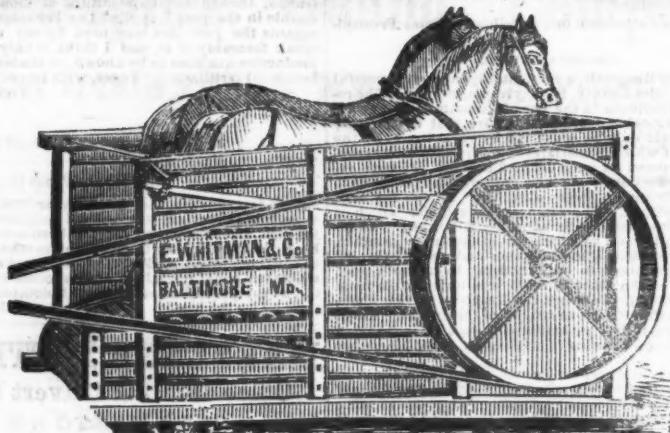
No. 2 Bowly's Wharf, 2d door from Pratt street,

Would respectfully call the attention of our friends and the public generally to our stock of Groceries, Liquors and Teas. Particular attention paid to weights of wheat and sales of all kinds of Country produce.

mhl-ly

AMERICAN FARMER—ADVERTISER.

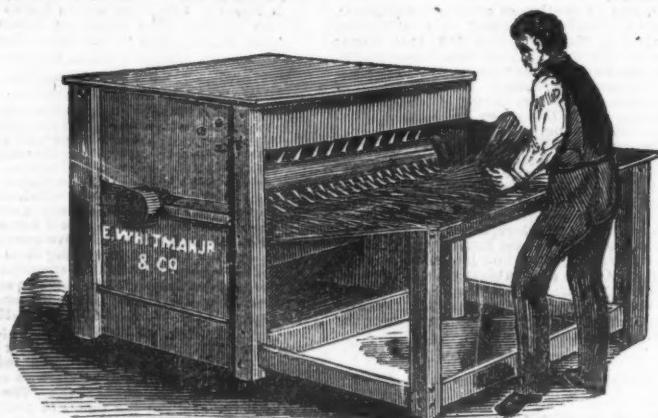
E. WHITMAN & CO'S
WROUGHT IRON RAILWAY HORSE POWER.
MANUFACTURED IN BALTIMORE FOR SOUTHERN USE.



The experience of 20 years in the manufacture of this Horse Power, has enabled us to present one that cannot be broken, and one that is worth a score of the Cast Iron Railway Powers, which are hawked and peddled about the country. Price, \$110

E. WHITMAN & CO., 63 Exchange Place, Baltimore.

E. WHITMAN & CO'S
IRON CYLINDER THRASHER.



This is the only Thrasher that cannot be broken or worn out by use. If its first cost is a little more than some others, yet its quality, safety and durability fully justifies the increase in cost, and makes it decidedly the cheapest in the end of any machine sold, and in fact it is often remarked, that no Farmer will buy any other machine, who understands the advantage of this over all others.

PRICE OF 24 INCH THRASHER,

PRICE OF 30 INCH THRASHER,

If a STRAW CARRIER is attached, \$15 will be added to the above prices.

COMMON THRASHERS also on hand. Price \$40.

\$60

50

E. WHITMAN & CO., 63 Exchange Place, Baltimore.

AMERICAN FARMER—ADVERTISER.

E. WHITMAN & CO.



Have made arrangements to manufacture and supply the demand of the South and West, with one of the most Valuable Implements required by farmers who are improving their lands, viz:

J. W. FAWKES' PREMIUM LIME AND GUANO SPREADER.

PREMIUMS AWARDED THIS MACHINE, ARE AS FOLLOWS:

Virginia State Fair, First Premium, on Lime Spreader, \$30; on Guano Spreader, \$30. In 1854, Pennsylvania State Fair, on Lime Spreader, \$5—Maryland State Fair, First Premium on Lime Spreader, \$5—Union Fair of Virginia and North Carolina, First Premium on Lime Spreader, \$20; on Guano Spreader, \$20—Virginia State Fair, First Premium on Guano Spreader, \$30—Rappahannock Agricultural Fair, First Premium on Lime and Guano Spreader, \$10.

PRICE OF LIME SPREADER, \$100

DRILLS! DRILLS!! DRILLS!!!

PENNCOCK'S CELEBRATED WHEAT DRILLS so well and favorable known in all parts of the country, are manufactured and for sale by us this season at the following prices, viz:

7 Tined Drills without Guano Attachment,	\$65 00
7 " with "	85 00
8 " without "	70 00
8 " with "	90 00

There is no Drill made, which has given such universal satisfaction as the above, and they have improved in their manufacture.

au1

E. WHITMAN & CO.

SPRING TOOTH WHEAT RAKE.

At the recent Trial of Reapers at Chestertown, a premium of \$20 was awarded to Messrs. R. Sinclair Jr. & Co. for one of the above useful implements, which was manufactured by E. Whitman & Co., who are the only manufacturers in the State. Persons in want of a good and reliable Wheat Rake or Gleaner, will send their orders direct to the manufacturers at No. 63 Exchange Place.

au1

E. WHITMAN & Co.

AMERICAN FARMER—ADVERTISER.

TO FARMERS. MEXICAN GUANO

THE SUBSCRIBER has in store and for sale, two car-
goes, (584 tons) of
BROWN MEXICAN GUANO,

which he will sell, delivered from Messrs. Hooper &
Chesterborough's wharf, Fell's Point, at \$15 per ton or
2,240 lbs. in bulk.

A. B. PATTERSON,
No. 59 South Gay-st.

This is to Certify, that Dr. Luther, President of the
Philadelphia Guano Company, reported to me that the
Esmeralda Guano, like that purchased by A. B. Patterson,
Esq., of Baltimore, has given unusual satisfaction to those
who have used it in Pennsylvania, showing better results
even than the Peruvian. And the agents of the Company in
Philadelphia, are selling the same at \$24 per ton, in bags.

Wm. F. MUROCK,
Per P. de Murgulando, Sec. Philadelphia Guano Company
Agency, Baltimore.

BALTIMORE COUNTY, Aug. 19th, 1857.

A. B. Patterson, Esq:

DEAR SIR.—I promised I would give you the results of
the application of the "Esmeralda Guano" you sold me,
and it gives me pleasure to state that on newly cleared
ground, where several crops have failed, I have now as
fine a corn, potatoe, and buckwheat crop as any in the
country surrounding me.

I also applied Peruvian Guano on part of the corn, side
by side, and it is impossible to tell one from the other.

A. HOFFMASTER.

BALTIMORE COUNTY, June 13th, 1857.

To A. B. Patterson, Esq:

DEAR SIR.—I am happy to inform you the Mexican Guano
purchased of you has produced most wonderful re-
sults. I tried it on some of my poor land, on corn, and it is,
without doubt, twice as good where I put it in the hill,
as my corn on good clover sod, where the ground has been
limed twice. I also tried it on potatoes, and the vines are
twice as strong as where I manured them heavy with stable
manure. I also tried it in my garden, and find my plants
much more thrifty than any in the neighborhood, although
I gardened two weeks later than my neighbors.

I wish you to save me ten tons more of it, for my fall
crop of wheat and rye. Very truly yours, &c.,
John M. McCOMAS.

COTSWOLD BUCKS.

THE SUBSCRIBER has for sale a few very
superior COTSWOLD BUCKS, one and
two years old. The long standing reputation
of this flock, and the prizes that have been
awarded it at the different State Agricultural
Fairs, where they have been exhibited for several years,
and at the United States Agricultural Fair, held at Philadelphia,
last October, show their superiority. Apply to the
Editors of the American Farmer, or to the subscriber,

WILLIAM REYBOLD,

jul-4t* Delaware City, Delaware.
Delaware.

(G— Richmond Southern Planter, and Cultivator, at
Augusta, Geo., will publish 3 times, and send bills to Mr.
Reybold, as above.)

COTSWOLD BUCKS.

THE SUBSCRIBER has for sale a few very
superior pure blood COTSWOLD BUCKS,
one and two years old. The prize awards of
Maryland State Agricultural Society, for several
years past, testify as to the character of his stock. Apply
to Editors of the American Farmer, or to

HENRY CARROLL,

jel-5t* Westerman's Mills P. O., Baltimore Co. Md.

MILLWRIGHT AND MACHINIST.

JAMES MURRAY, 43 York st. (near Light,) Balti-
more, Md., returns thanks for the continued favors of
the public. He has largely increased his patterns and fa-
cilities for doing MILL AND MACHINE WORK generally,
such as castings, wrought iron and brass work, &c.,
and warrants all kinds of work planned and erected by
him to operate well.

apl-ly

PRINTING OF EVERY DESCRIPTION EX-
ecuted in the neatest manner, on reasonable terms,
at this Office. Orders solicited.

PAGE'S IMPROVED

PATENT CIRCULAR SAW MILLS.

THE subscribers having greatly increased their
establishment are prepared to execute all orders
with promptness, and in the most workman-
like manner. They build three classes or sizes of
their CELEBRATED CIRCULAR SAW MILLS,
which have given so much satisfaction throughout
the country—STEAM POWERS, of all kinds,—
HORSE POWERS, GRIST MILLS, CORN AND
COB CRUSHERS and various other Machines and
Implements for economising labor.

Since their Portable Circular Saw Mills were in-
vented by and patented to their senior partner, they
have made many improvements, which render them
perfect in all their details, and justly entitle them
to be considered first among the labor-saving inven-
tions of the age.

A pamphlet containing full descriptions of their
three classes of mills, prices, terms, capacity for saw-
ing, &c. will be sent to any gentleman applying for
one by letter, post-paid.

Having recently obtained damages in an action
for infringement of their patent rights, they warn
the public against purchasing from unauthorized
builders, or their Agents.

GEORGE PAGE & CO.

N. Schroeder, near W. Balt. St. Balt. Md.
ju 1-1 yr

WILLIAM W. DUNGAN,

Commission Merchant, and Dealer in Fertilizers
of every description, offers for sale:

PERUVIAN GUANO, No. 1, furnished at Government
prices, the Ton of 2240 lbs., delivered either from
Ship, Warehouse at the Point, or at my Warehouse up
town, on terms advantageous to consumers; also, MEXI-
CAN GUANOS, White and Brown, A. A. selected from
Cargos rich in Phosphates.

COLOMBIAN GUANO, the "Ne Plus Ultra" of Phos-
phatic Guano.

"DE BURGS" SUPER PHOSPHATE OF LIME.

"RHODES" SUPER PHOSPHATE OF LIME, (from
Formula of "State Chemist.") Also, PLASTER, BONE-
DUST, and every known Fertilizer, which can be had in
Lots to suit, and at the Lowest Market Prices.

Will attend faithfully and punctually to the Sale or
WHEAT, CORN and PRODUCE generally, and to the
purchase of Goods of any kind, including FARM-STORES,
AGRICULTURAL IMPLEMENTS, SEEDS, &c.

ADDRESS, W. W. DUNGAN
No. 90 SOUTH CHARLES STREET,
BALTIMORE.

SUFFOLK PIGS AND SOUTH DOWN BUCK

LAMBS FOR SALE.

FROM STOCK which
received the premiums at the late Show of
the Maryland State Agricultural Society,
and equal to any ever bred in this State.
Apply to the editors of this paper, or to

C. B. CALVERT,

Bladensburg P. O., Pr. Geo's Co. Md.

PREMIUM PAINT—MONEY SAVED.

THE SNOW WHITE MINERAL PAINT,

MANUFACTURED by the Baltimore Paint Works, is
now used by Painters and Manufacturers through-
out the country, some of whom pronounce it superior to any
Mineral Paint ever offered to the public. It is 50 per cent
cheaper than White Lead, and quite as durable, and of
perfect whiteness. For sale by the Manufacturers' Agent,

H. F. STICKNEY,
27 Cheapside, Baltimore.

apl-6t

AMERICAN FARMER—ADVERTISER.

J. MONTGOMERY & BRO. DOUBLE SCREENED ROCKAWAY. GRAIN FAN. The best Fan in the United States! PRICE \$35.



The above cut is a representation of the Double Screened Rockaway Grain Fan, in full operation. It is manufactured and for sale by the Patantees at 151, 153 & 155 North High street, between Hillen and Gay sts., Baltimore, Md. It was patented December 20th, 1852; again, June 12th, 1853, and last improvement, January 20th, 1857. The recent improvement enable us to offer a *perfect machine*—the very best Fan ever offered to the Farmer, the Trade, or the Manufacturer. Its superiority has been acknowledged by all who have used or seen it used—and certain are we, that in this particular Implement, adapted as it is, to **ALL KINDS** of grain, the South, by our invention, has outrivaled the North or East—as it is incomparably superior to all inventions of this kind—we challenge competition from whatever quarter it may come. We have a large stock of the best materials on hand, and are prepared to deliver 800 Fans in due time this season, and solicit orders.

It will be seen by reference to the proceedings of the different Agricultural Societies of Maryland, Virginia, Delaware, North Carolina and South Carolina, that our Fan has been at nearly all the State and County Fairs, and took the FIRST PREMIUM over all others, for the last five years.

NOTICE.—We offer our services to our friends who need Agricultural Implements and Machinery of any description, to purchase the same for them, guaranteeing them the best in the market.

Patent Rights for sale, and Patterns complete, with all the information necessary for manufacturing.

THE FOLLOWING TESTIMONIALS ARE SUBMITTED:

DINWIDDIE Co., Va., Nov. 26th, 1856.

Messrs. J. Montgomery & Bro.

Without any solicitation, I do say with pleasure, that your truly celebrated Rockaway Fan, exceeds my most sanguine expectation in doing its work. I have used it with perfect satisfaction for two years past, it cleans faster and better than any I have ever tried. I believe it saved me the first year in cleaning my crop more than its cost; it is just the Fan the farmer wants and needs; therefore, I can safely recommend it to the Agricultural Community.

Respectfully yours, &c.,

THOMAS B. HAMLIN.

We are of opinion that the Wheat Fan of J. Montgomery & Bro. will in a day fan out more wheat and do it cleaner than any Fan we ever saw tried. We can, with the utmost confidence recommend it to the farmers of Virginia.

JOHN OSBORNE,

SAM'L. C. LEGRAND.

of Charlotte Co., Virginia.

Your Fan is a perfect machine, doing all that is claimed for it, and answering the highest expectations.

J. R. COUPLAND,
Stony Point, near Yorktown, Va.

All orders addressed to the undersigned, at Baltimore City (Md.) Post office, will be promptly attended to.

J. MONTGOMERY & BRO.,

No. 155 N. High street, between Hillen and Gay, Balt.

marl-ly

ROGERS & BOYER'S SEED AND AGRICULTURAL WAREHOUSE,

No. 29 Market Street, Philadelphia.

MANUFACTURERS of Woodbury's Premium Horse Power and Thresher and Cleaner, Mowing and Reaping Machines, Corn Mills, Ammoniated Super Phos. Lime, Chemical Fertilizer, Bone Dust, Dealers in Guano, &c. All the most approved Agricultural and Horticultural Implements made to order. Dealers in Imported and American Field and Garden Seed, &c., &c. Inventors and Manufacturers of the Cast Steel Extending Point Surface and Subsoil Ploughs.

nov-17

SEWING MACHINE.

WHEELER & WILSON
Manufacturing Company's Improved



**FAMILY
SEWING MACHINE.**

LYON MANUFACTURING COMPANY'S LIGHTNING CONDUCTORS, OTIS' PATENT,

THE ONLY SURE PROTECTION.

Constructed and Sold Wholesale and retail, at

American Building, 126 Baltimore Street,
AND No. 3 BOWLY'S WHARF.

WM. MERRELL, Agent.

MARYLAND AGRICULTURAL IMPLEMENT WORKS.

SAMUEL COTTINGHAM

WOULD call the attention of Farmers and Dealers to his large stock of **FARMING IMPLEMENTS** for the Spring Business. He would name in part the following:

Ploughs in their variety, Cultivators, Harrows, Corn Shellers, Wheat Reapers and Mowers, McCormick's, Ray's and Manney's patents, and has in store and for sale, Peiton's Patent Internal Geread Power, and also the Geared Thresher, which supersedes the necessity of the leather belt. These Machines are worthy the attention of the farmer. There are three sizes—4, 6 and 8 horse power.

The undersigned would also call the special attention of the farmer to a NEW HAY CUTTER, gotten up by the subscriber the past winter, cheap and good, and not liable to get out of order.

Plough and machine castings by the quantity or single piece. Garden and Field Seeds, Shovels, Forks, Ox-yokes, Scott's Little Giant, and many other Implements too numerous to mention in an advertisement.

My manufactory is in full operation, which will enable me to keep up a first class stock of implements, not to be surpassed by any similar establishment.

Repairing of all kinds done with neatness and dispatch. Call and examine for yourselves, before purchasing elsewhere.

SAMUEL COTTINGHAM,

(Formerly Cotttingham & Johnson,) No. 150 PRATT STREET WHARF, BALTO., MD.

mhi-ly

AMERICAN FARMER—ADVERTISER.

EXECUTOR'S SALE OF REAL ESTATE.

In pursuance of the power vested in us by the will of M. L. Spindle, deceased, we will sell privately, if we can, if not, then at public auction, on the 15th day of September next, if fair, or not the next fair day, the well known estate called CORBIN HALL; containing EIGHTEEN HUNDRED AND FIFTY Acres of River Flats. This farm lies

beautifully on the Rappahannock River, in the county of Middlesex, about three miles above Urbanna, and is bounded on the North and South by two creeks, one of which is navigable for vessels of ordinary size. In point of healthiness and fertility, this farm is unsurpassed by any other in that region, and is, by experiment, susceptible of a high state of improvement by the use of lime.—The farm has been cultivated in the three field system, each field containing about 500 acres, leaving an ample sufficiency of wood land for the support of the farm, and is enclosed by a fence of three-quarters of a mile long. This farm possesses all the advantages of the river, such as fish and oysters, wild fowl, and the convenience of putting off grain, &c. The improvements consist of a DWELLING HOUSE, containing 6 rooms, and the necessary out houses.

This property will be shown to persons wishing to view it, by Mr. Ingram, the manager on the estate, or Mr. James W. Fisher or John W. Callis, who live on adjoining farms.

We believe the title to be good, but conveying as we do, we shall convey only such title as is vested in us under the said will.

TERMS:

One-third cash, the balance in one, two and three years payments, the deferred payments to carry interest from the date of sale, and to be secured by deed of trust on the farm. Address,

L. P. TOD.

Port Royal, Caroline county, Va.

JAMES SPINDLE, {

JOHN BIRD, {

Occupacie, Essex county, Va.

jul-3t

400 & 700 ACRES OF LAND FOR SALE,

LYING in Gloucester County, Va., containing, by recent survey, 700 acres: one-half is heavily timbered with Oak, Hickory, Ash, Pine, Chestnut, the balance cleared in a high state of productiveness, and well divided with chestnut rails. 300 acres is prime bottom land, 100 of which is cleared, and equal in productiveness to the best western lands. It is well watered, and has an inexhaustible supply of marl of the finest variety, and very accessible; most of the land has been marled, producing a marked improvement. The improvements are a large and comfortable brick dwelling, and all the necessary out buildings. Steamers run to Norfolk and Baltimore 5 times a week, with the option of the New York and Baltimore markets for produce. It is convenient to Court House, Churches, &c. It is an excellent location for a Saw Mill, (there is one in course of erection on the place). Lumber is in great demand, and commands high cash prices at the Mill. It is considered from its advantages of up and low land, fine water, and marl, society, &c., one of the most desirable estates in eastern Virginia. There are 150 acres in Wheat. Price \$20.00 per acre. Terms a commodating. Possession given at any time.

Also 400 acres similar in all respects to the above tract—price \$15 per acre. The tracts will be sold separate or together, as may be desired, or a further sub-division will be made.

Apply to MESSRS. SANDS & WORTINGTON,
Editors American Farmer, Balt.

SMALL FARM FOR SALE.

I OFFER FOR SALE, privately, my farm, situated in the county of York, immediately on the stage road leading from York Town to Hampton, six miles from the former place, and about two miles from the water.

This FARM contains 175 to 200 ACRES—80 acres are cleared; the remainder is well covered with pine, chestnut, oak and cedar. It is enclosed with a good chestnut fence; a never-falling stream of water runs through it. There are some twelve or fifteen acres, most of which has been cleared—with a little enclosure could be converted into an excellent meadow. The buildings are DWELLING HOUSE, SMOKE HOUSE, KITCHENS, BARN AND STABLE. All the buildings are new, with the exception of one of the kitchens. An excellent well of WATER in the yard.

Joining the above farm there is a tract of 60 ACRES—50 of which are cleared—which I offer for sale with the above tract. This last tract has on it an abundance of marl, and has a good enclosure around it.

The terms will be made very accommodating.

Address, W. N. WARE,
May-3t YORK TOWN, Va.

RAPPAHANNOCK LAND FOR SALE.

THE SUBSCRIBER offers for Sale the valuable farm known as "Crondoll," situated in Richmond county, and lying on the Rappahannock River, opposite the town of Tappahannock. This farm contains 450 acres land, is productive and in good state of improvement. Facilities for shipping rarely surpassed. Location as healthy as any on the River—fish and wild fowl very abundant. The Dwelling, Barn, Stable and Cabins all new. Farming utensils and stock of every description can be purchased with the farm if desired. Negroes belonging to the estate can also be hired by the year if desired. Possession given in time to put in crop of wheat this fall. One third of the purchase money will be required in cash, the purchaser can have his own time to pay the residue, say ten or twenty years, with interest from date of purchase. For further particulars address JOHN M. BROCKENBROUGH, aut-tf Warsax, Richmond County, Virginia.

FAIRFAX LAND FOR SALE.

WISHING to dispose of our land in Fairfax Co., Va., we will sell a great bargain to any person or persons wishing to locate in this beautiful and healthy part of Va. The land consists of two tracts lying adjoining, and on the county road from Centreville to Manassas Station, on the Orange and Alexandria R. R., 9½ miles from the former and 4 from the latter, containing respectively 182 and 250 acres of the red shell or slate soil, and is a part of that famous red vein of land so well known in New Jersey and Virginia. The 2 tracts could be conveniently divided in three tracts or advantageously farmed in one. The improvements are a good Dwelling House, Barn, Corn House, Ice House, Well of water in the yard, an Orchard of good fruit, Apples, Peaches, Pears, Cherries and Plums; the farms are under good fence, and greater part well taken in grass; wood and water abundant. For further particulars address Wm. P. Trott, Centreville P. O., Fairfax, Co., Va. aut-tf S. TROTT, Wm. P. TROT.

VALUABLE VIRGINIA FARM

FOR SALE—Situated in Gloucester County, at the mouth of Ware River, in full view of the Mob Jack and Chesapeake Bays. It contains 283 Acres. About 180 acres cleared arable land, in fine heart, and well adapted to Wheat, Corn, Oats and the Grasses. Vessels can lie within 100 yards of the shore. Buildings are all new, substantial and commodious. Fish, Oysters and Wild Fowl abound, and Seine hauling would be found profitable. Physicians consider the location very healthy, and the neighborhood and society unsurpassed, with places of Worship convenient, and Steamers for Norfolk and Baltimore twice a week.

Further particulars can be had on application to the Editors American Farmer, or on the premises to JOHN P. TALIAFERRO.

Q3-Letters addressed to Gloucester C. H., Va., will be promptly attended to. feb 1-tf

A VALUABLE FARM FOR SALE.

A VALUABLE FARM of about 400 acres, in the Northern Neck of Virginia, is offered for sale, about 100 acres are heavily timbered with oak, hickory and chestnut. It abounds in springs of the purest water, is convenient to mills, navigation and landings and wharves for steamers to Baltimore, Norfolk and Alexandria. The neighborhood is good; the country remarkably healthy; the churches are Methodist, Baptist and Episcopal. The dwelling contains fifteen large well arranged and airy rooms. The location is a good one for a well conducted school, male or female, particularly of the Methodist or Baptist denomination. The stock, farm utensils, and furniture, if desired, would be sold with the farm. The terms can be made very commodating. Address, THOMAS JONES, Jr., Warsaw, Virginia.

4,000 Acres of Land For Sale.

THIS land lies in Chesterfield District, S. C., immediately on the Pee Dee River and the Cheraw and Darlington Railroad, and by the latter part of the present year, will be within a few hours ride of the city of Charleston. There are about 1,300 acres of the Tract cleared, which produces finely, without manure of any kind. The balance is densely covered with a heavy growth of White Oak, Post Oak, Ash, Elm, Dogwood, Hickory, Cotton, Walnut, Poplar, &c., with a CAVE BRAKE extending near over the entire tract. About 200 acres of the tract lies in the sand hills, which for health and fine Springs of Water, is probably unsurpassed by any part of this State. The tract will be divided to suit purchasers. For particulars address E. B. C. CASH, Cheraw, S. C. jyl-4t

AMERICAN FARMER—ADVERTISER.

9,500 Acres Land For Sale.

THE UNDERSIGNED, acting as agent, will sell eleven FARMS, lying in the counties of Matthews, Middlesex and Gloucester, varying from 2 to 1700 ACRES, some of which are the most desirable situations in Eastern Virginia. For particulars address

EDWARD SEARS,

jyl-6th New Upton P. O., Gloucester Co., Va.

Reference—M'Conkey, Parr & Co. Baltimore, Md.

VALUABLE LANDS FOR SALE.

I WILL sell at private sale, several VALUABLE FARMS, located in Talbot county, Md. These lands are known to be among the most valuable in the county, being all highly improved and delightfully situated. For terms and further particulars, apply to the subscriber, near Trappe, Talbot Co., Md.

THOMAS HUGHLETT.
Also two fine BLACK HAWK FILLIES, three years old this spring, both out of blooded mares.

jel-5th

 **T**HIS SUBSCRIBERS will sell at private sale a TRACT OF LAND containing about two hundred and ten Acres, about 3½ miles from the city of Annapolis, and very convenient of access from the Annapolis and Elkridge Railroad. The soil is of excellent quality, and susceptible of the highest degree of improvement. The terms will be made known upon application to the subscribers, residing near Millersville, and the premises will be shown by Mr. ESSEX R. DORSEY, or Mr. RICHARD D. SELLMAN, whose lands adjoin the same.
jel-1st

RAMSAY HODGES,
MARY ANN HODGES.

VALUABLE JACK AND JENNET FOR SALE.

 **J**JENNET, valued at \$300; 1 JACK, 2 years old, \$400, extra large and beautiful, but has a crooked fore leg during the voyage; 1 JACK, 2 years old, \$400, small, without fault; 4 JACKS, 1½ to 3 years old, \$500 each, middle size, without fault; 1 JACK, 2½ years old, \$800, strong, without fault; 1 JACK, 2 years old, \$1600, very high and beautiful. These are all guaranteed imported animals from Spain, during the past month, and will be delivered at the port of Charleston or Baltimore at the above prices. Apply to

J. M. FREDSLUG, Charleston, S. C.,
jel-1st *to Editors of American Farmer.*

JESSE MARDEN,
INVENTOR AND MANUFACTURER
OF

**RAILROAD, LIVESTOCK, HAY, COAL, DEPOT,
WAREHOUSE,**

and all other SCALES, that are now used, keeps constantly on hand a large assortment of every size, and makes to order at short notice, and warrants them to stand tests with any Scales that are forced in market on commission, and will sell at much less prices. The public are invited to send their orders, or call at my old stand, 59 South Charles street, corner of Balderston.

jelly

JESSE MARDEN.

Great Improvement in Threshing Machines.

WE are manufacturing 100 of the latest improved Railway Horse Powers, with Overshot Iron Cylinder Threshers, the shakers so arranged as not to take perceptibly from the power. Price of Two Horse Power and Thresher including band and fixtures for hulling clover-seed, complete, \$140, one Horse Power \$130. Also 5 sizes Hay Presses, from \$75 to \$100 each. All warranted. Please address W. W. DINGEE & Co., YORK, PENNSYLVANIA, and receive a circular.

mhl-1st

Hare's Patent Concentrated Blood Manure.

30 PER CENT. CHEAPER THAN PERUVIAN GUANO.

THIS powerful FERTILIZER, composed of highly concentrated animal matter and pure Phosphate of Lime, has proved itself after five years' fair competition in England, superior to the best Peruvian Guano. That its value is greater to the farmer, is certified by Dr. A. A. Hayes, State Assayer, Boston, and Professors James C. Booth and John Frazier, of Philadelphia.

Sold at \$50 per net ton, by

JOHN L. MIFFLIN, Sole Agent,

jel-1st 139 SOUTH WHARVES, above Walnut-st., Phil

FERTILIZERS AND SEEDS.

PERUVIAN, MEXICAN, AFRICAN AND COLOMBIAN GUANOS—MAGNESIAN LIME AND BALT. Co.'s STONE AND SHELL LIME—SALT, PLASTER AND GROUND BONES—Also such Super-Phosphates and Manipulated Guanos as the Manufacturers will guarantee to contain a specified per centum of fertilizing properties. I will also furnish choice selections of Seed Wheat, Rye, Oats and Corn—Clover, Timothy and other Seeds.

jul-4th

N. E. BERRY,
No. 63 Pratt Street, Baltimore.

PURE BONE DUST.

TO FARMERS, &c.—10,000 bushels of this invaluable Fertilizer, warranted pure unadulterated Ground Bones, and its perfect genuineness certified by the State Chemist, whose analysis may be seen at our office. Among other invaluable elements it contains the large proportion of 55.3 Phosphate of Lime.

For sale in three-bushel bags in quantities to suit purchasers. Price 65 cents per bushel, bags 12½ each or 4½ cents if returned.

W. GRANGE & CO.

119 Lombard street, Baltimore.

MEXICAN GUANO—Ground White, cargo of brig Neptune, containing 73.51 per cent. of Bone Phosphate of Lime.

Brown AA, cargo of schooner H. W. Fry, containing 59.15 per cent. of Bone Phosphate of Lime.

Brown AA, cargo of schooner L. H. Nickerson, containing 63.46 per cent. of Bone Phosphate of Lime.

Brown AA, cargo of schooner Victoria, containing 62.35 per cent. of Bone Phosphate of Lime.

Brown A, cargo of brig Toledo, containing 48.14 percent. of Bone Phosphate of Lime.

Brown B, sundry cargoes, very dry, containing 38.74 per cent. of Bone Phosphate of Lime.

All in store, and for sale at lowest market prices, either in bulk or barrels, by CHARLES R. PEARCE,
mhl-1st 66 BUCHANAN'S WHARF.

BONE DUST AND POUDRETTE,

WARRANTED free from any mixture—no Glue extracted, or any Chemicals used, leaving the Bone Dust in its natural or pure state, weighing from 55 to 60 lbs. per bushel.

The Poudrette is as good as can be made, and for sale low. (G) REFERENCES.—D. T. Perine; G. V. Lurman; J. Tyson, Jr., and J. W. Randolph, Baltimore County; Wm. B. Stephenson and Lloyd Norris, of Harford County; Wm. Baker Dorsey and Dr. Allen Thomas, of Howard County; C. Stabler and Wm. S. Bond, Montgomery County; A. A. Bernard and Maj. Lee, Va.

(G) Orders left at the American Farmer office will be attended to. jel THOMAS BAYNES.

NOTICE TO FARMERS.

Schuylkill Magnesian Lime.

I AM AUTHORIZED to sell and deliver cargoes of this LIME, (three to five thousand bushels considered a cargo,) at any landings of rivers of the Chesapeake, where there is a depth of water not less than 5½ feet. Also PE-RUVIAN and MEXICAN GUANO, at the lowest prices, for sale by

N. E. BERRY,
No. 8, Bowdy's Wharf.

LIME! LIME!! LIME!!

WE have constantly on hand, a large quantity of the best ALUM LIME, both slackened and unsackled, for Agricultural and Building purposes, which will be sold at the lowest rates. As we have sold our vessels, customers will give their orders to the Captains. All orders will be promptly attended and shipped as directed, by addressing

GRISCOM & BURROUGHS,
CITY BLOCK, BALTIMORE.

mhl-1st

J. C. TURNER. C. P. YARDLEY.

TURNER & YARDLEY'S

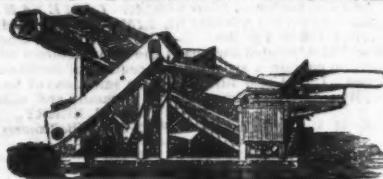
PLANING MILL & LUMBER YARD,

No. 140 Light street Wharf, Baltimore.

Have constantly on hand and for sale at fair prices, a general assortment of 4-4 and 5-4 Dressed Flooring, 4-4, 6-4, and 8-4 Dressed White Pine, Dressed Stepping, and Weather-Boarding, Rough Lumber, Shingles and Laths. jyl-1st

AMERICAN FARMER—ADVERTISER.

FIRST PREMIUM MACHINE.



AT THE

National Mechanics' Institute Fair
IN WASHINGTON, D. C., MARCH, 1857.

The attention of farmers and those interested in Wheat Threshing Machines, is invited to the above machine. For simplicity, strength and durability, it has no equal, and is warranted to thresh and clean in a marketable manner, from 1 to 2 bushels of wheat per minute. The Thresher is made entirely of iron, with anti-friction self-oiling boxes, and the Separator and Cleaner is built here, with particular reference to the wants of Southern farmers, being made more substantial in all its parts than those procured at the North. In fact, DANIEL WOODBURY'S PATENT GENESEE VALLEY SEPARATOR AND CLEANER, challenges competition from every source for its unrivaled ease of action, simplicity, (having but 4 bands) expediteness and economy. The Grain is delivered in the bag ready for market! Another important fact is, the very short period of time required to set it down ready for work, as it need not be removed from off the wagon.

The HORSE POWER (PEI TON'S) is too well known and appreciated to need any words here.—Those manufactured by me are much heavier and stronger than any other powers in use here of the modern plans, and warranted to run as light.

The following is a List of Premiums awarded this Thresher and Cleaner:

Fair of the Philadelphia Society for Promoting Agriculture, 1855—N. J. State Fair, at Camden, N. J., 1855—Pennsylvania State Fair at Harrisburg, Pa.—Berk's Co. Fair, at Reading, Pa.—New Castle Co. Fair, at Wilmington, Del.—Kent Co. Fair at Dover, Del.—and Metropolitan Mechanics' Institute Fair, at Washington, D. C., 1857.

I refer you to the following CERTIFICATES, for the opinions of those who have used them:—

Woodlawn, near Prospect Hill P. O.

Fairfax Co., Va., May 6, 1856. {

I take great pleasure in recommending to the public the Threshing Machine which is now being manufactured in Alexandria, Va., by Mr. James A. McPherson. They were introduced into this county about two years ago by Mr. A. B. Ransom, who now has one in successful operation. In the threshing season this machine is preferred to all others ever used in my neighborhood, and is constantly in operation. With the proper force of horses and hands it will thresh more grain, and cleaner, and separate it more effectually from the straw and chaff, than any machine I have ever seen in use. Mr. Ransom has threshed my crop for the last two seasons, and the work has been done so well that there has been no necessity to run the grain through a fan after it comes from the machine in one single instance before carrying it to market. There is one other advantage this machine has over all others I have ever seen in use. It is this: it rarely cracks or mashes the grain. I have had wheat, rye and oats threshed by this machine, and it has never failed to give entire satisfaction. I have conversed with a number of my neighbors who have used this machine extensively, and without a single exception they agree with me in the above statement.

W. W. BALL.

PROSPECT HILL, VA., May, 1856.

I have read with great pleasure Mr. James A. McPherson's announcement of his opening extensive machine shops in Alexandria, for the manufacture and repair of all kinds of Agricultural implements; it is a desideratum long needed in this section of Virginia, as every farmer I think will attest, and it is fortunate for us that Mr. McPherson has undertaken it. Mr. McPherson is generally known in Fairfax and Loudon counties, where he has furnished Threshers, Mowers & Reapers to numerous farmers with in the last four years, and I believe with entire satisfaction, certainly so to myself, and I have heard nothing to the contrary from any quarter. I therefore hope that Central Virginia Farmers will seek no farther than Alexandria to supply their increasing wants in Mr. McPherson's line of manufacture. Com. Thos. Ap C. Jones, U. S. N.

President of the Fairfax Agricultural Society.

We, the undersigned, have used James A. McPherson's Thresher and Cleaner in the Falls of 1854-5, were much pleased with its operations, and believe it to be a superior machine when properly attended to.

ANDEW SEITZ,	SAMUEL ROPP,
WM. WENNER,	GEO. M. FRY,
JNO. W. WENNER,	DANIEL T. SHREVE,
WM. F. FAULEY,	GEO. W. JOHNSON,
SAMUEL H. FRASER,	JOHN T. MONEY.

I would also respectfully refer you to the following gentlemen who have used these Machines:

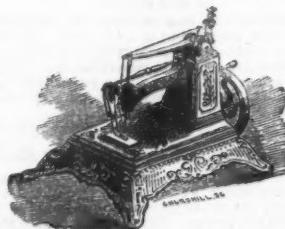
A. C. BELT, Gordonsville, Loudon County.	
G. H. WHITMORE, " "	
WM. TAVENNER, Hamilton Store, Loudon County.	
ELI T. RUSE, " "	
DAVID BROWN, " "	
PROUT & VERMILLION, Aldie, " "	
JOSEPH NICHOLS, Philemont, " "	
SIDNEY HAWLING, " "	
GEO. AYRE, Middleburg, " "	
Capt. SOL HOGE, " "	
H. TAVENNER, Warrenton, Fauquier Co., Va.	
H. VANDERHOOF, Rockville, Montgomery Co., Md.	

Q—The subscriber is also prepared to furnish Reapers and Mowers, and all other kinds of Agricultural Implements usually manufactured at such an establishment.—Our terms are Cash, or approved negotiable paper.

JAMES A. MCPHERSON.

SHOP—CORNER FAYETTE AND COMMERCE-ST.,
jel-4t Alexandria, Va.

WATSON'S
\$10 SEWING MACHINE,
NOW UPON EXHIBITION, AND FOR SALE BY



ROBBINS & CO.

Proprietors of the

BALTIMORE STOVE WORKS.

No. 46 LIGHT STREET, Baltimore,

Proprietors for the State of Maryland, and Agents for the entire Southern Country.

Q—State, County or Town Rights of this invaluable MACHINE for sale. Address as above. apl

GRAND AND SQUARE PIANO FORTES.

 HENRY HARTGE & CO., MANUFACTURERS OF GRAND & SQUARE PIANO FORTES, No. 131 Franklin street, near Eutaw, where may be found Pianos which for elegance of finish, and sweetness of tone, and agreeable touch are second to none in the country. jly-jly:

AMERICAN FARMER - ADVERTISER.

SINCLAIR'S PREMIUM
SPIRAL WROUGHT IRON ELASTIC CYLINDER
THRASHING MACHINE,
WITH STRAW CARRIER ATTACHED.



**SINCLAIR & CO'S
THRESHING
MACHINERY!**

Workmanship, Materials, and
principle of construction

WARRANTED

Inferior to none in the U. S.

The spiral arrangement of our Cylinder, (see fig.) causes a reduction of draught, greater rapidity of Thrashing, runs more regularly, and without that noise or surge, so objectionable to the parallel cylinder. We have also attached our Open Concave, which causes a more rapid discharge of wheat unbroken. All our Cylinders are made on the open principle, instead of the plain surface, which causes an agitation of the air when running, and blows the dust out with the chaff, instead of producing an atmosphere at the mouth of the machine, so annoying and injurious to the health of the feeder.

Prices as follows:—

Width of Cylinder,	16	20	25	30	Inch.
Price,	45	50	60	70	Dollars.
Straw Carrier,	15	15	18	20	"

PRICE OF PARALLEL THRASHERS, \$5 each less.

WIMPLE'S PATENT THRASHERS, Separator and Cleaner combined, price \$160.

may 1

R. SINCLAIR, JR. & CO., MANUFACTURERS.

AMERICAN FARMER—ADVERTISER.

TO FARMERS AND GARDENERS!

MAPES' NITROGENIZED AND Mapes' Improved Super Phosphate of Lime:

FOR SALE IN BAGS OF 160 POUNDS EACH.

The subscribers have been appointed the sole Agents in Baltimore for the sale of these celebrated fertilizers, and have constantly on hand a full supply at the following prices:—

MAPES' NITROGENIZED SUPER PHOSPHATE OF LIME, at 2½ cents per lb.
" IMPROVED " " " " 2½ " "

N. B.—These are the Manufacturers' prices in New York, and at his factory in New Jersey. The Improved Super-Phosphate is composed of Bone-dust, Sulphuric Acid, Peruvian Guano and Sulphate of Ammonia. The Nitrogenized has the same ingredients mixed with an equal weight of dried blood.

For poor soils or soils deficient in Nitrogenous substances the Nitrogenized will be found of greater value than any manure known. To those desirous of testing the effect of these fertilizers samples will be furnished on application to us.

We have also pamphlets containing acknowledgements of their merits from many well known Agriculturists, giving full instructions as to their application, with certificates of complete analyses of them, from eminent chemists.

ALSO

MAPES' POTASH PHOSPHATE,

For Grass and Grain Crops, Wheat, Rye, Oats, Corn and Barley. For sale, at 1½ cents per lb. in bags of 160 lbs. each. This article is particularly recommended for top-dressing of Grass and Grain crops.

ALSO

MAPES' COTTON AND TOBACCO FERTILIZER,

Prepared especially for these Crops. For sale, at 2 cents per lb., in bags of 160 lbs. each.

All these Manures are compounded by Professor Mapes himself.

Orders by mail from Strangers, should be accompanied with the money or proper references.

RICHARDSON & HOFFMAN, Agents,

No. 95 Smith's Wharf, Baltimore.

HILDRETH No. 1 Super-Phosphate of Lime.

THE SUBSCRIBERS having been appointed the agents for the Sale of the above cheap and valuable Fertilizer, and relying upon the certificates from New York and the Eastern States, (where it has been used for some years, and its superiority over other Fertilizers generally admitted,) and the accompanying certificates of gentlemen whose practical experience and scientific knowledge is well known, and appreciated by the Farmers of Maryland, we feel every confidence in recommending Hildreth No. 1 Super Phosphate of Lime, as one of the best and most durable Fertilizers ever offered in this market. It is put up 150 lb. bags, free from lumps, and fine enough to sow by the Drill. We invite those who wish to increase their crops, and improve their lands to give it a trial. All orders promptly attended to,

By CORNELL & DORSEY,

No. 70 South street, Baltimore.

The following certificate from the celebrated chemist, Dr. Jackson, is a satisfactory guarantee of the superior quality of this Fertilizer:

"STATE ASSAYER'S OFFICE,"

No. 39 SOMERSETT St., Boston, Dec. 24th, 1853. }

"HENRY A. HILDRETH, Esq.—Dear Sir—I have made a chemical examination of your Fertilizer, and find TWENTY-FOUR AND SEVEN-TENTHS PER CENT. SOLUBLE IN WATER. The solution is found to contain Phosphate of Lime, Ammonia, Potash, Soda, Phosphate of Soda, Chlorides, Sulphates and Organic Matters. These ingredients will all prove excellent fertilizers, and the Preparation you have made is well adapted to sandy soils and loams of the Middle and Southern States. It will serve as a good fertilizer on ANY SOILS and for ANY CROPS, and WILL NOT INJURE PLANTS, if it should be used to excess, for all the ingredients are in a proper condition to be readily and con-

tinuously absorbed as food by plants, and there is some alkali in excess which on silicious soils will operate very favorable.

"I have no doubt of the very useful action of this Fertilizer. Twenty-four per cent. of soluble matter conveys ENOUGH of your Phosphates to the plants, in a sufficiently soluble condition to be taken up with water. It will prove a great fertilizer for Tobacco, Corn and all Cereal Grains, AND MAY BE USED MORE SAFELY THAN GUANO.

Respectfully your friend and servant,
(Signed) "CHAS. T. JACKSON, M. D.,
Assayer to the State of Massachusetts."

CHEMICAL EXAMINATION OF HILDRETH'S NO. 1 SUPER PHOSPHATE OF LIME.

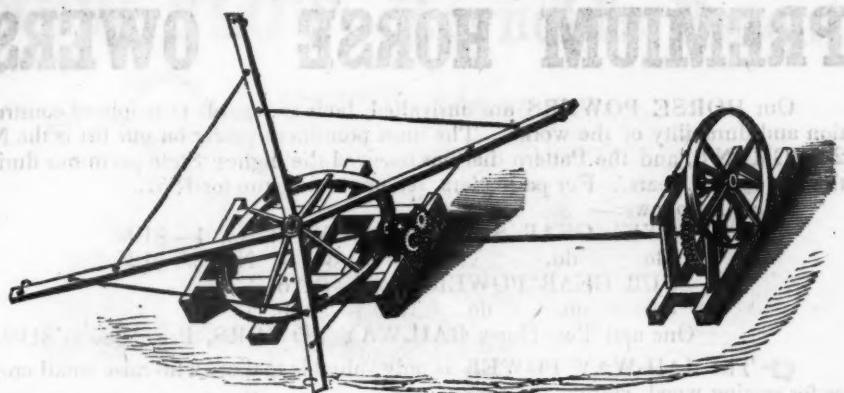
"Messrs. CORNELL & DORSEY, BALTIMORE.—Compounds like this are much more certain Fertilizers than those composed exclusively of Bi-Phosphate of Lime; although it is the most valuable Fertilizer when Phosphoric Acid is alone deficient in the soil.

"The absence of any one of the following elements from any soils, renders it perfectly sterile, although dressed with Ammonia or any of the rest, at the rate of 300 lbs. per acre, viz: POTASH, SODA, CHLORINE, SULPHURIC ACID, MAGNESIA, LIME, PHOSPHORIC ACID and AMMONIA.

"All of these can be easily determined in the above compound, and many other elements which would only complicate the analysis without increasing its value to those who do not frequently associate them with Fertilizers.

"DAVID STEWART, M. D.,
Chemist to Maryland State Agricultural Society, &c.,
Annapolis, Md., 24th March 1853." sp-48.

THRESHING MACHINES, for 1857.



The growing of Wheat and Corn in the South and West having become so important to the Farming community, we have given much attention to Machinery required in the Cultivation and Harvesting of those Crops. In the past 12 years we have introduced many Improvements in Machinery for the above purposes, one of which is the Horsepower, a cut of which we give above.

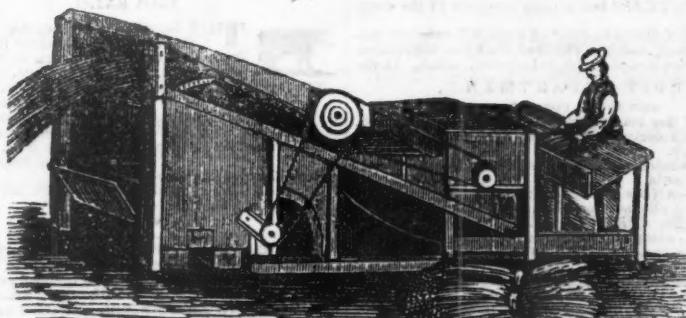
The above cut represents a NEW HORSEPOWER that was added to our stock last season, and which we take great pleasure in recommending. It is one of the most simple, durable and strongest Powers in use. It is manufactured by us, and is warranted to be WELL MADE, of the best materials, and in the most substantial manner.

It is a four-horse Power, but has sufficient strength for 6 or 8 horses, and we recommend it as one of the best Horsepowers in use in this Country. PRICE \$120.

E. WHITMAN & CO.,

No. 63 Exchange Place, Baltimore, Md.

SEPARATORS.



The above cut represents WHITMAN'S PATENT SEPARATOR. This machine may be attached to any of the common Horse Powers in use; it threshes and cleans Wheat, Oats, Rye or Barley, at one operation, and will eventually be generally adopted by all who raise grain of any kind to be threshed, as it is a saving (when properly used) over the common Thresher, of at least 50 per cent., and is much more convenient.

With this machine you may thresh in the field or barn, as the wheat all goes into boxes as fast as threshed. It is durable, and may be easily managed by any person who will give it proper attention. **CASH PRICE, \$150.**

Those desirous of purchasing will please call and examine them.

E. WHITMAN & Co. 63 Exchange Place, Balt.

PREMIUM HORSE OWNERS.

Our HORSE POWERS are unrivalled, both as regards principle of construction and durability of the works. The most prominent power on our list is the No. 2 SEGMENT, and the Pattern that has received the highest State premium during the last several years. For particulars, see our Catalogue for 1857.

Prices as follows:—

BEVEL GEAR SEGMENT POWER No. 1—\$100.
do. do. do. do. No. 2—\$125.

SPUR GEAR POWER No. 2—\$110.
do. do. do. No. 3—\$140.

One and Two Horse RAILWAY POWERS, Price \$85 to \$110.

• The RAILWAY POWER is only valuable to those who raise small crops, or for sawing wood, cutting straw, &c.

R. SINCLAIR, JR. CO.,

Manufacturers, Baltimore.

may 1

Genesee Valley Nurseries.

FRUIT TREES, ORNAMENTAL TREES, SHRUBS, ROSES, &c., &c.

 THE Proprietors of these well known Nurseries have on hand a large and well-grown stock of FRUIT TREES, ORNAMENTAL TREES, SHRUBS, ROSES, GREEN-HOUSE AND BEDDING PLANTS, DAHLIAS, PHLOXES AND OTHER HARDY BORDER PLANTS.

The assortment of ROSES is very extensive, and embraces all varieties which could be obtained and which are considered worthy of cultivation. Our collection of HYBRID PERPETUALS is the most complete in the country.

The GREEN-HOUSE DEPARTMENT receives particular attention, and the stock of Fuchsias, Geraniums, and other Green-House Plants, is large and varied. In the

FRUIT DEPARTMENT,

OUR STOCK CONSISTS OF APPLES, of the leading varieties, Dwarf and Standard. PEARS, of all desirable varieties, on Quince and Pear stock.

PLUMS—A choice selection of well-grown trees of popular sorts.

CHERRIES—All the popular sorts, Dwarf and Standard.

PEACHES—A choice assortment.

NECTARINES, APRICOTS and QUINCES, in variety.

GRAPES—A complete assortment of both native and foreign sorts, including many of recent introduction.

SMALL FRUITS.

CURRENTS—Twenty-five choice sorts, including many new varieties.

RASPBERRIES, GOOSEBERRIES, BLACKBERRIES and STRAWBERRIES of all new and approved varieties.

We have, for the accommodation of NURSERIES, STOCKS and SEEDLINGS, including APPLE, PEAR, PLUM, CHERRY, QUINCE, &c., &c. Also, SEEDLINGS OF EVERGREEN TREES, including Norway Spruce, Balsam Fir, Scotch Pine, Austrian Pine, Larch and Hedge Plants.

ORNAMENTAL DEPARTMENT.

The stock of Ornamental Trees and Shrubs, both Deciduous and Evergreen, will be found to embrace all that is desirable among LAWN and STREET TREES and SHRUBS. ROSES consisting of Hybrid Perpetual and Summer Roses; Moss, Bourbon, Noisette, Tea, Bengal or China and Climbing or Prairie Roses.

HARDY HERBACEOUS or BORDER PLANTS and BULBOUS FLOWER ROOTS, an extensive assortment.

All the above will be disposed of at low rates, and on advantageous terms. For further details we refer to our full

set of Catalogues, which will be mailed to applicants who enclose a one cent stamp, for each.

No. 1. Descriptive Catalogue of Fruits, &c.

" 2. do. do. do. Ornametal Trees,

" 3. do. do. do. Shrubs, Roses, &c.

" 4. do. do. do. Green-House and Bed-

ding Plants, Dahlias, &c.

No. 4. Wholesale or Trade list for Nurseries and Dealers.

• Amateurs and others interested in Horticulture, are respectfully invited to visit our Show Grounds and Green-Houses at 153 South Sophia-st., a short distance from the central part of the City.

• All communications to be addressed to

A. FROST & CO.,

Genesee Valley Nurseries, Rochester, N. Y.

FOR SALE,

 THE Imported Alderney (or Jersey) bull COMMODORE, caled 1852. Second Prize bull under two years, in the Island of Jersey, 1854. Imported August, 1854.

First Premium for Imp. Alderney Bull under 3 years, Maryland State Show 1854.

First Premium for Imp. Alderney Bull over 3 years, Maryland State Show 1855.

First Premium for Imported Alderney Bull, Maryland State Show 1856.

First Premium for Jersey Bull, U. S. Ag. Society's Show, at Philadelphia, 1856.

Also in the Premium Jersey Herd, " " 1856.

PRICE \$300.

Jersey Bull MIDSHIPMAN—Caled April 11, 1854—Sired on the Island of Jersey—Dam Imported Gazelle.

Second Premium Alderney Bull, under 2 years old, Maryland State Show 1855.

First Premium Alderney Bull, between 2 and 3 years, Maryland State Show 1856.

First Premium Jersey Bull, between 2 and 3 years, U. S. Agr. Society's Show, Philadelphia, 1856.

PRICE \$150.

Jersey Bull Calves under one year—PRICE \$50.

Imp. Devon Bull RED ROSE, (Davy's Herd Book, 220) Sire Earl of Exeter, " " " " 30 Dam Dairy Maid, " " " " 107

Bred by Mr. James Quartly, of Molland, Devon. Calved March, 1853. Imported August, 1854.

First Premium Imp. Devon Bull, between 1 and 2 years, Maryland State Show 1854.

First Premium Imported Devon Bull, Maryland State Show 1856.

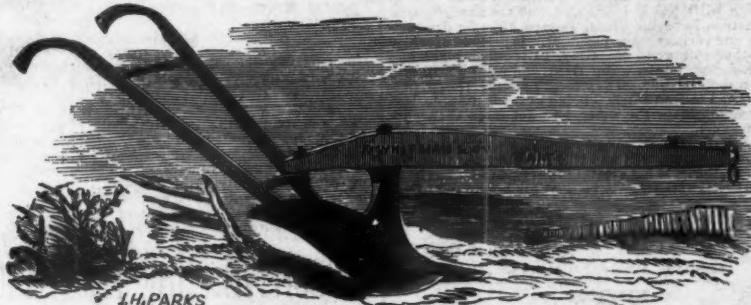
PRICE \$250.

J. HOWARD McHENRY,

PIKESVILLE, BALTIMORE COUNTY, MD.

aul-4f

NEW PLOW—Reynold's Patent.



J.H. PARKS

The Plow, being an important implement in agriculture, we have recently given much attention to its manufacture, and at a heavy expense, have procured the best and most perfect set of machinery in use, and are now prepared to fill all orders for Plows of any description, on as favorable terms as can be had in the United States, quality and workmanship considered. We wish to call the particular attention of dealers to our manufacture of Plows, which, we think, cannot be surpassed in this country.

The advantages of deep plowing, and at the same time breaking and pulverizing the soil, have become so popular among our farmers, that new models have become necessary, and fully realizing the importance of the above, we have at considerable expense and labour, succeeded in procuring and perfecting a plow, combining the above advantages, together with others of much importance. This plow also combines the advantages of a steel edge point and share, which are self-sharpening, and the easy and simple adjustment of a steel edge cutter, with all of the above, making it at once, a simple, durable and easy draught plow, and the article which has long been sought for by the farming community.

PRICES—	No. 00—\$5	No. 1—\$7	No. 3—\$9	No. 5—\$11
	" 0—\$6	" 2—\$8	" 4—\$10	" 6—\$12

E. WHITMAN & CO.

No. 63 Exchange Place, Baltimore, Md.

1000 PLOWS, now in Store and for sale by **E. WHITMAN & CO.**

100 TONS PLOW CASTINGS, on hand and for sale by

E. WHITMAN & CO.

100 "YOUNG AMERICA" CORN MILLS, for sale by
E. WHITMAN & CO.

500 STRAW CUTTERS, New pattern, for sale by
E. WHITMAN & CO.

300 CORN SHELLERS, extra heavy, for sale by
E. WHITMAN & CO.

THE LARGEST STOCK OF AGRICULTURAL IMPLEMENTS ever offered in the United States, is now
for sale by
E. WHITMAN & CO.

No. 63 Exchange Place, Baltimore, Md.

AMERICAN FARMER—ADVERTISER.

GREAT IMPROVEMENT IN THE MANUFACTURE OF WOOD TUBE, For Chain Pumps, Water Pipe, &c.

G. K. TYLER & CO. have at their Steam Saw Mill, corner of Wolf and Fell streets, Baltimore, Md., one of WYCOFF'S BORING MACHINES, and are now prepared to manufacture Tube for Chain Pumps, Pipe for conducting water, and various other purposes. It is made of white pine or other soft wood scantling, in sections eight feet long, with socket joints, water tight, and can be well laid by any common laborer. They are, in many respects, preferable to Lead or Iron Pipes,—being quite as durable, less likely to contaminate the water, and not more than one-third of the cost.

Farmers, Railroads, Mining Companies and others who wish to convey water, will find it to their interest to investigate this matter. What greater luxury can a farmer have than PURE RUNNING WATER at his house and barn? It not only promotes the health of man and beast, but saves both time and money.

Prompt attention to all orders addressed to

G. K. TYLER & CO.

july 1 Corner of Pratt & Patterson sts., Baltimore.

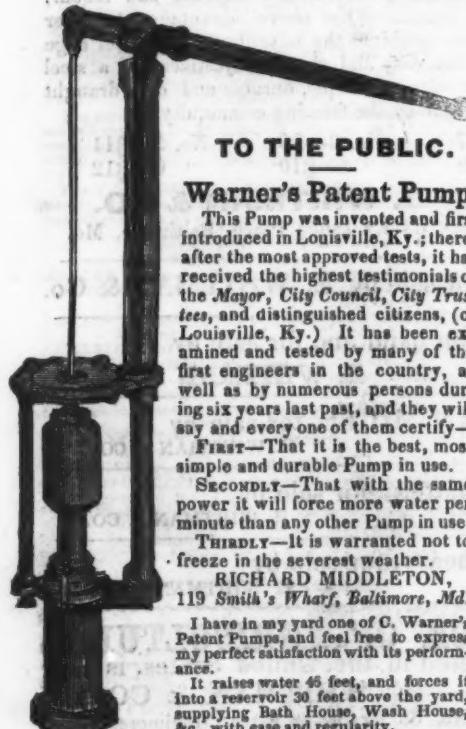
NOTICE.

THE Roslin Tile Works are now prepared to furnish to farmers and others, Tile for under and surface draining, at the following prices:

2 Inch Pipe Tile	at	\$15 per thousand.
3 "	"	20 "
4 "	"	25 "
5 "	"	30 "
6 "	Horse-shoe Tile,	12 "
3 "	"	15 "
4 "	"	20 "

(C) All orders sent to the works, or to GEO. V. SCOTT & Co., Agents, Petersburg, Va., will receive prompt attention. Samples of each kind may be seen at the office of E. WHITMAN & Co., Baltimore.

july 1 WM. Y. KEESTER.



TO THE PUBLIC.

Warner's Patent Pump.

This Pump was invented and first introduced in Louisville, Ky.; thereafter the most approved tests, it has received the highest testimonials of the Mayor, City Council, City Trustees, and distinguished citizens, (of Louisville, Ky.) It has been examined and tested by many of the first engineers in the country, as well as by numerous persons during six years last past, and they will say and every one of them certify—

FIRST.—That it is the best, most simple and durable Pump in use.

SECONDLY.—That with the same power it will force more water per minute than any other Pump in use.

THIRDLY.—It is warranted not to freeze in the severest weather.

RICHARD MIDDLETON,
119 Smith's Wharf, Baltimore, Md.

I have in my yard one of C. Warner's Patent Pumps, and feel free to express my perfect satisfaction with its performance.

It raises water 45 feet, and forces it into a reservoir 30 feet above the yard, supplying Bath House, Wash House, &c., with ease and regularity.

CHARLES REESZ, Lanvale-st.

july 3:

PIANOS! PIANOS!!

WAREROOMS, 181 BALTIMORE STREET, AND 24
WEST FAYETTE STREET,

Immediately in the rear of the splendid Dry Goods establishment of Messrs. McElroy, on the corner of Charles and Fayette streets.



THE attention of those desiring a very superior PIANO, is called to the celebrated Pianos of NUNNS & CLARK,

AND CHICKERING & SONS.

They contain all the improvements of any real value, and their instruments have been thoroughly tested for the past 35 years, and are unquestionably the best Pianos made. They possess remarkable sweetness of tone, action beautifully even, and light of touch, rapidly responsive, and capable of immense power.

Also, a complete assortment of Rosenkrantz's Pianos, with all the late improvements, at very low prices. Address oct 1

F. D. BENTEN, Baltimore.

A POSITIVE CURE FOR CANCER,

WITHOUT THE USE OF CAUSTIC OR THE KNIFE.

Reliable and uniform in its effects in all cases, and proved, beyond a possible doubt, in every case to which it has been applied.

The undersigned will guarantee a cure of all external Cancer where Vital Parts are not involved, before the application is made. As the wonderful effects of this remedy is now pretty well known, it is deemed needless to say more than what is expressed above.

A pamphlet giving the full description of cures and the manner of treatment, with other information on the nature and character of Cancer, sent to all persons requiring the knowledge it contains. Address, JOHN CATHERINE, may 1-ly Office No. 102 Baltimore st. Baltimore.

HARNESS, SADDLERY, TRUNKS, &c.

SAMUEL HUNT,

No. 203 Baltimore st., between St. Paul's and Charles sts.

(Opposite Hamilton Easter's Marble Building.)

Is extensively engaged in the manufacture of TRAVELLING TRUNKS,

HARNESS, of all descriptions,

LADIES' and GENTLEMEN'S SADDLES,
BRIDLES, &c., &c.

Also for sale, a large assortment of WHIPS, COLLARS, HAMES, HORSE NETS, SPURS, BRIDLE BITS, BUFFALO ROPES, CARPET BAGS, SADDLE BAGS, HORSE COVERS, HALTERS, &c., &c.—at prices as low as the same quality of work can be bought for in this or any other city.

apl-ly

A VALUABLE MILL.

THE attention of Farmers is called to a new FLOWN, Corn and Cob or Spice Mill—a new invention, which is the most simple and perfect Grist Mill ever offered to the public, occupying only three feet square, weighing only 250 pounds, and is capable of making superfine flour, and grinding corn at the rate of ten bushels per hour, for months, without being any the worse for use. Price for Corn and Cob Mill, \$50, for the Flour Mill, \$75.

Manufactured and for sale by

ROGERS & BOYER,
29 Market st., Phila.

WILLIAM HARRIS,

 GUN, RIFLE AND PISTOL MANUFACTURER, No. 116 Pratt street, door below South, Baltimore.

W. H. keeps constantly on hand a large assortment of Bird and Ducking Guns (double and single barrels;) Six barrelled Revolvers—Rifles made to order, Dupont's Gunpowder, Powder Flasks, Bird Bags, Shot Belts and Pouches, and many other articles necessary for sportsmen. Repairing done at the shortest notice, and with neatness.

mhi-lyr

DOORS, SASHES, BLINDS, GLAZED SASHES, WINDOW AND DOOR FRAMES.

FARMERS can save fifty per cent. in obtaining the above necessary articles for building purposes, by purchasing from

GEORGE O. STEVENS & CO.
47 Pratt street, Baltimore.

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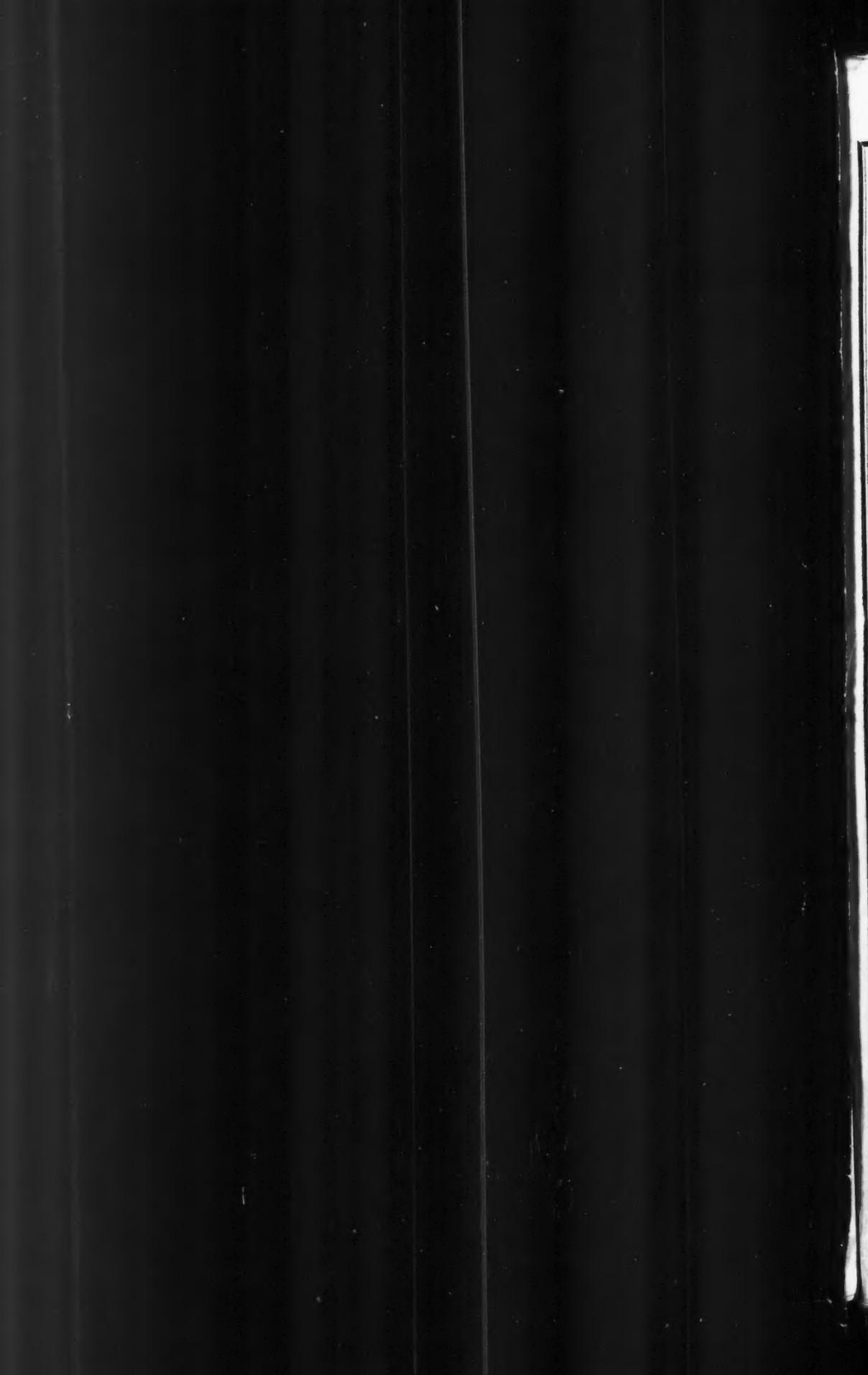
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THE AMERICAN FARMER.

AULT'S CELEBRATED ENGLISH GARDEN SEEDS.

WE are now prepared to furnish the following seeds for fall sowing, viz:  Ault's Early York Cabbage, Ault's early Large York Cabbage, Ault's early Bullock's Heart Cabbage, Ault's Premium Flat Dutch Cabbage, Ault's Large Drumhead Cabbage, Green Curled Savoy Cabbage, Yellow Drumhead Savoy and all other kinds of Cabbage, also Ault's Improved Swede or Rutabaga Turnip, Yellow Hybrid, White Globe, Early Flat Dutch, White Flat and Red Top Norfolk Flat Turnip seed; also Cucumber, Spinage, Kale, Radish, Lettuce, Cauliflower, together with other Seeds for fall sowing, all of which are fresh and genuine, and will give entire satisfaction to all who may purchase from us. For Sale wholesale and retail by SAM'L. AULT & SON,

aul-3t Corner of Calvert and Water Streets, Baltimore.

FRUIT AND ORNAMENTAL TREES FOR SALE.

THE SUBSCRIBER would call the attention of those desirous of planting out fruit or ornamental trees this fall to his large stock of Peach and other fruits; the stock being large both of Standards and Dwarfs, of the following, viz: Apples, Pears and Cherries, together with Apricots, Nectarines, Quinces, Plums, Grapes, New Rochelle Blackberry, Raspberries, Currants, Strawberries, &c. Also a large stock of Evergreen and deciduous ornamental trees. 50,000 2 years growth Silver Maple seedlings, and other Nursery stock.

The descriptive Catalogue with prices annexed, and a whole sale trade list will be sent on application. Applicants for either will please enclose a one cent stamp.

Address ISAAC PULLEN,

aul-4t Hightstown, Mercer Co., N. J.

KETTLEWELL'S
NO. 1 & 2
MANIPULATED GUANO.

No. 6 Bowly's Wharf, Balt.

No. 1 containing (warranted) 8 per cent. of Ammonia.
2 " " 45 to 50 per cent. Phos. of Lime.
2 " " 5 per cent. of Ammonia.
50 to 55 per cent. Phos. of Lime.

No. 1 \$48 Per Ton of 2,000 lbs.

2 43 " "

Can always be had at No. 6 Bowly's Wharf.

Certificates from the most reliable sources will be shown at my office, demonstrating its superiority over Peruvian Guano in the production of a first crop, and which cannot fail to satisfy the most cautious or incredulous.

An invitation is extended to all who have tried it, side by side with Peruvian Guano, to report any experiment where it has failed to equal Peruvian results.

It is a perfect powder, every particle ready for application, put up in strong bags, and to guard against imitation, the manufacturers name is stencilled upon every bag.

No farmer should purchase his manures without thoroughly investigating the merits of this article. This, at least, will cost nothing; and may prove of mutual advantage. All certificates which may be published by whomsoever, of the result of "Manipulated Guano" upon all crops previous to the last spring, have reference to the article manufactured at my works, as the originator of this most valuable of all fertilizers—apply to

JOHN KETTLEWELL,

or G. OBER, General Agent,

No. 6 Bowly's Wharf, Balt.

aul

HICKOK'S

KEYSTONE

CIDER MILL,

MANUFACTURED BY THE

EAGLE WORKS, Harrisburg, Pa.

THIS sterling machine has within the past year been put to severe actual tests, and been very much improved by the addition of a 22 inch fly-wheel, new gearing, joint bolts, and other minor improvements, and is now offered to the public with the certainty that it is made in the very best manner, and that it will grind and press easier and faster than any other Mill in the market. Dealers and others supplied on liberal terms. Address

W. O. HICKOK,

aul-3t Agent Eagle Works, Harrisburg, Pa.

FARM FOR SALE.

THE SUBSCRIBERS offer a private Sale, their Farm lying immediately upon the Piankatank River, supposed to contain about 700 acres, in Middlesex County, about 5 miles below Urbanna. About 400 acres of this land is open and in a good state of improvement, and the balance, 300 acres, is in Pine Wood, convenient to be hauled to the River, where a good price can be obtained. The improvements consist of small Dwelling House and good out buildings for house and farm uses. Terms will be accommodating; any person who wishes to purchase can address John E. Segar, Jamaica, Va., McConky, Parr & Co., Baltimore, or William R. Segar, Urbanna, Va., who resides on the Farm, and will take great pleasure in showing it to any one who wishes to examine it.

aul-3t W. M. B. & JOHN E. SEGAR.

FARM IN WESTMORELAND CO., VA.

THE SUBSCRIBER will sell a very desirable Farm in Westmoreland County, Virginia, containing about 500 acres. It is very healthy, pleasantly situated, very productive, is well watered and heavily timbered, and is within three miles of navigable water.

For terms, which will be accommodating, address Editors American Farmer, or, W. A. SPENCE, Jr.

aul-3t Montross P. O. Westmoreland Co., Va.

POTATO DIGGER! POTATO DIGGER!!

A NEW IMPLEMENT, Manufactured by Pitkin Bros., Manchester, Conn., and Louisville, Ky. Price \$10. This Digger is simple and compact, and with ordinary care will last a life time. One man with a team can dig as fast as fifteen men can pick up.

The potatoes are gathered clean without being cut or bruised. An especially fine thing for sweet potatoes. See Feb. '57 No. of American Farmer, for account of trial. A descriptive Circular sent to applicants.

For Sale by principal Agricultural Implement dealers.

aul-3t

AMMONIATED SUPER-PHOSPHATE OF LIME.

THE SUBSCRIBERS who are Manufacturers of the original Ammoniated Super-Phosphate of Lime, would direct the attention of Farmers and Planters to this invaluable fertilizer. For Sale in lots to suit purchasers at \$45 per ton of 2000 lbs.

ROGERS & BOYERS,

aul-3t 111 LATE 29 MARKET ST., Philadelphia.

JAS. S. SUTER & SON'S

STEAM TURNING AND SAWING WORKS,
AND HARD WOOD LUMBER YARD,

No. 11 N. FREDERICK STREET, BALTO.

BRACKETS, Newel Post, Banisters, Columns, Carriage and Cart Hubs, &c. Mahogany, Walnut, Cherry, Poplar, Oak, &c., to which we invite the attention of Farmers and Builders.

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S. SANDS MILLS,
STEAM BOOK & JOB PRINTING ESTABLISHMENT,
OFFICE OF THE "AMERICAN FARMER."

THE AMERICAN FARMER.

REESE'S

ORIGINAL MANIPULATED GUANO.

ANALYSIS, { Ammonia, 8 pr. ct.
 { Bone Phosphate of Lime, 45 to 50 pr. ct.

THE ADVANTAGES resulting from a *thorough, intimate* combination of Peruvian with the Phosphatic Guanos, over the Peruvian alone, is no longer a question of enquiry, it having been fully demonstrated by the concurrent experience of all who used the above article, on their Wheat and other crops during the past year. We unhesitatingly refer to all who made use of it, and many may be found in every county of the States. Experience has taught farmers that a continued use of Peruvian Guano alone, does actually depreciate the soil. Such a result is inevitable from the proportion of its elements, (Ammonia and Phosphate). It does not contain sufficient phosphate of lime in an ordinary application of from 150 to 200 lbs. to supply the wants of the growing crop, hence to make up the deficiency, the soil parts with a portion of its original supply. This process of draining the soil from year to year cannot fail to result in a ruinous depreciation. The above article was produced to remedy this acknowledged defect in Peruvian Guano. It was first offered to the public by John S. Reese, of the undersigned firm, in the Spring of 1856, and has been used on all crops to which Guano is usually applied, with such remarkable effect as to have attracted the attention of their consumers of Guano in all parts of this and adjoining States. It has not only fully equalled Peruvian Guano on the growing crops, but in a majority of instances it has exceeded that article, and it has in no case failed to produce a luxuriant set of Clover. This article, as seen by the analysis, contains from 45 to 50 per cent. bone phosphate of Lime, which is nearly double the quantity contained in Peruvian Guano. Now an application of 200 lbs. per acre gives the soil from 40 to 50 lbs. more phosphate than is used by the crop. Hence its successive use for five years would leave deposited in every acre of soil 200 lbs. phosphate more than at the beginning, which could not fail to add vastly to its *fertility*. The same application of Peruvian for the same time would have deprived the soil of its original supply, and would hence render it *less fertile*. These are considerations worthy the attention of Farmers; for the improvement of the soil is of the first importance. No simple mixture of the two Guanos will answer the purpose of the above article. The combination must be *thorough and intimate* in order to obtain the solvent action of the Ammonia upon the Phosphate of Lime. It must be uniform in order to secure a uniform application. Such a combination, it is obvious, cannot be made by the means at the command of the farmer, for the least part of the difficulty is to reduce the lumps to a fine condition. The above article is so manipulated by the aid of machinery adapted to the purpose, that every particle of both Guanos is reduced to a finely pulverized condition, and is as *thoroughly, intimately* and uniformly combined as if brought from the original deposite in the same condition.

This article is ready for use so soon as received on the farm, requiring no preparation, which is a matter of no small importance. Its *uniformly pulverized and dry* condition renders it peculiarly adapted for application with the drill, which method is now believed by many to be the best. The loss resulting from the use of Guano in an imperfectly prepared condition, is much greater than is appreciated. In order to meet the fall demand, and supply all orders, we have constructed entire new machinery, to which we have added important improvements, and our article is now made with greater care and accuracy than at any previous period of its introduction.

No apprehension need be entertained that this article will be allowed to depreciate in quality. We give every possible assurance that none but the very best qualities of Guano are used, and that good faith with the public will be scrupulously observed, and we at all times invite the most rigid investigation. Farmers induced to use this article by its past effects must be particular to order REESE'S Manipulated Guano, and see that our name is on every bag, otherwise we cannot be responsible for its results. For more lengthy account of the production of the above article, see our pamphlet, which may be had by addressing the undersigned or our agents.

JOHN S. REESE & CO.

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Office No. 10 Exchange Building, Baltimore.

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Messrs. E. T. Winston & Co., Richmond, Va.

Messrs. A. K. Phillips & Co., Fredericksburg, Va.

Messrs. Peebles & White, Petersburg, Virginia.

Messrs. Wheat & Bro., Alexandria, Va.
" Anderson & Reynolds, Norfolk, Virginia.

Mr. William A. Miller, Lynchburg, Va.
Messrs. Richards & Miller, Philadelphia, Pennsylvania.

Mr. Wm. B. Horsey, Seaford, Delaware.
" Nath. Horsey, Horsey's Roads, Delaware.

Messrs. De Rosset & Brown, Wilmington, N. C.

We give below the names and residence of a few prominent gentlemen who have used the article, to whom we refer those who may wish to make personal inquiry:

Mr. Richard Thomas, Easton, Md.; J. K. Cook, Centreville, Md.; Maj. J. F. Lee, Washington, D. C.; Col. Jos. Tuley, Winchester, Va.; Samuel Brown, Woodstock, Md.; Hon. C. W. Dahney, Hanover, Va.; J. B. Thomas, Centreville, Md.; Ramsey McHenry, Harford Co., Md.; P. Grabill, Emmitsburg, Md.; John Webb, Newton, N. C.; Col. J. Carroll Walsh, Harford Co., Md.; Jas. T. Earle, Centreville, Md.; Dr. Thomas S. Wilson, Queenstown, Md.; N. C. Dickerson, Rockville, Md.; B. Samuel, Aylett, Va.; Uriah Griffith, Montgomery Co., Md.; Geo. H. Burwell, Clark Co., Va.; Wm. H. Bowen, Centreville, Md.; N. L. Wade, Harmony, Va.; Edward Hopkins, Kent Island, Md.; Lem. Offutt, Woodstock, Md.; Dr. Rich'd. T. Carter, Queen Ann Co., Md.; Col. J. P. Corbin, Spotsylvania, Va., W. W. W. Bowie, Maryland.

NOTICE.

The recent advance in Peruvian Guano, by the *Government Agents*, of \$5 per ton, necessarily compels us to make an advance of \$2 per ton on our article. The price is now \$50 per 2,000 lbs., cash, in Baltimore. The cause of our advance is obvious, and in accordance with all our previous publications, viz: that its price would rise and fall with Peruvian Guano.

